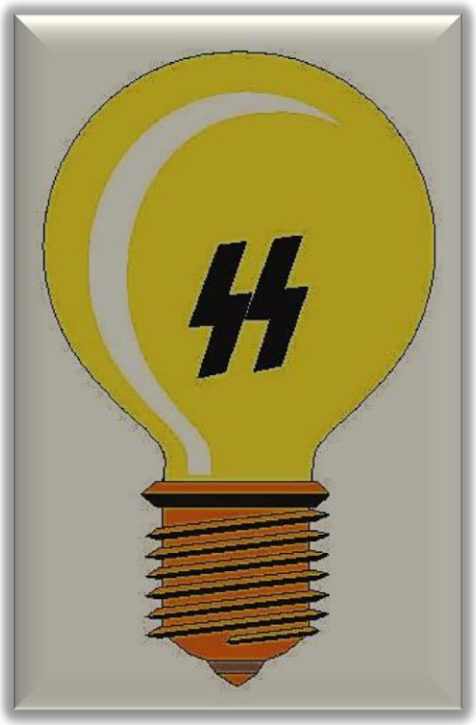
THE LIGHT BULB MAFIA

A history of the secret global light bulb cartel – and why the insidious global transformation to modern LED, OLED and LD lighting technology, if not soon stopped or radically changed – is going to curse the whole world with BLINDNESS!



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INTRODUCTION

What a tedious subject? Light bulbs! But whoever, in a thousand years, could have ever dreamed that the world's biggest, by far most richest, most powerful, secret cabal of ruthless criminals would ever become – not an alliance of illicit drug barons, oil Sheikhs, transnational banking pirates, pharmaceutical companies, or even a gang of itinerant stock market fraudsters – but a relatively unheard of cartel of innocuous – modern LED light bulb manufacturers. A cartel, that is now so rich and powerful, it even plays a big part in controlling the UN, EU and most governments.

The primary aim of this book is to try and convince the reader **that all white LED light bulbs and light fittings** used for general lighting, **all LED and OLED** smartphone screens, tablets, iPhones, iPads, computer screens, television screens and car headlights, as they exist on the world market today, at the time of writing (July 2014), unless they are banned, substantially altered, modified, or properly filtered, in the not too distant future, **are gradually going to curse the whole world with permanent blindness.**

LEDs are absolutely superb for some applications such as for use in indicator lighting, some instrument panels (even this application could be questionable in airliners), torches etc. – but for general 'white' lighting applications in commercial premises, street lighting, offices, homes, computer screens, smart phones, tablets and car headlights they are a malignant curse.

These allegations are very serious indeed, yet extremely difficult to appreciate or understand for the average person. The main problem in stopping people from clearly comprehending the real dangers of LED, OLED and LD light bulbs and lighting products, is that most of the world's supposed *"*experts*"* promoting them – including the majority of leading corporate shareholders, business executives, scientists, ophthalmologists, eye specialists, doctors and governments – are among those specific individuals who most vociferously lie about the inherent dangers of them.

Because a global lighting 'mafia-like cartel' of fascist multinational corporations (and the giant banks that fund them) has developed over the last 200 years and gained such a huge economic and political stranglehold over the global electrical and lighting market – not only do they now deliberately severely limit the life of their products through a devious system of carefully "planned obsolescence" to greatly increase profits. They cover up the serious adverse health effects of them by bribing leading scientists and doctors from the top to the bottom of the supply chain to get them to blatantly lie through their teeth to claim their products are perfectly safe when they very well know they are not.

They consistently bribe political parties, politicians, government officials and bureaucrats at the highest levels, to coerce them to pass new environmental laws to make their products mandatory or, in the interests of global warming and climate change, have certain products regulated out of existence while having their own preferred products heavily subsidized by the state.

It is a massive global business, with light bulb manufacturers now being some the biggest lobbyists and sponsors of political parties and governments around the world.

Therefore, without a proper, *independent, unbiased, HONEST* study of this controversial subject, it is virtually *impossible* for the average person to even begin to appreciate just how

evil and powerful this hidden force behind the scenes marketing LED light bulbs really is - and why the industry is so intent on rapidly transforming the world toward LEDs by deliberately covering up the severe damaging characteristics of them.

There are still a few courageous, genuine, HONEST, dedicated people, (including a minority of concerned scientists and doctors themselves) that have already written some superb material exposing the inherent dangers of LEDs. References to the work of some of the best of these people are acknowledged later in this book.

However, in spite of most of these individual's marvellous work in speaking up largely concentrating on the clinical aspects of LEDs, UV and blue light toxicity, the author has felt for some time that a small book should be put together linking this already splendid research with the other, much greater 'darker' aspect that is generally not so well known – that of the scale of endemic corruption, collusion, dishonesty and basic lack of integrity permeating the industry at the highest levels – an industry that has arisen to become, for want of a better term, nothing less than a ruthless gang of "light bulb mafia" or "Illuminati" despots.

The first chapters may seem a little "monotonous" or tedious to read and not directly related with the later chapters about the more technical and clinical characteristics of LEDs which most people may likely be more interested in specifically reading about.

But the author has felt these earlier chapters are necessary to see the full picture – which explains why the MAJORITY of leading businessmen, scientists and doctors throughout the world are, in most cases, simply compulsive liars – so widely misrepresenting the real dangers of LED products.

Because of the fact that the vast majority of leading professionals approve of LEDs and are going along with the corporate scientific data about them – most of the time not even questioning it – and only a relative minority of dedicated, truly independent doctors and scientists around the world, so far, have vociferously spoken up against LEDs – the assertions in this book claiming that they are so evil and damaging to human health, without the introductory first chapters, would make the later chapters about the clinical aspects of LEDs with their serious adverse health implications extremely difficult to believe for many people.

Some of the lighting industry's deviousness will begin to become apparent even in the book's first chapter about the history of light bulbs, and as it is, deeply connected to the widespread corporate lies and propaganda about Global Warming, Climate Change and Sustainable Development. However, later chapters will expose their corruption much more and explain what a ruthless gang of psychopathic criminals many of them actually are.

While they continue to relentlessly, unashamedly lie about the plain, serious, adverse health effects of some of their dubious products, particularly LEDs and OLEDs, to meet sales targets and to make ever more billions in profits – the whole world is being permanently cursed with a blanket of blue light that eventually, if not corrected, will lead to premature blindness.

This lighting cartel involves some of the oldest, biggest, richest and most corrupt individuals, families, banks and companies on earth. Only when one comes to *fully understand* the *extent* of their deviousness, which they have been involved with for over a 100 years in their compulsive love for money and power, can one truly appreciate why, in now promoting LED

light bulbs for the world, they have developed such a marked propensity not to tell the full truth about them.

While this controversial little book is no doubt far from being perfect or a comprehensive composition on this extensive subject – hopefully, it may at least help summarize in relatively simple terms, what is happening and go some way towards helping ordinary people understand the full truth behind LEDs – why they are so dangerous – yet paradoxically, are still being so widely and aggressively promoted.

What particularly makes LEDs so insidious, so diabolically evil is that the serious damage they inflict to human eyesight and health is so imperceptible, so slight and gradual, that it will never be seen or even recognised by most people until it is too late.

Young people under 20 and especially children under 10 are especially most at risk, before their eyes have fully matured. The damage at first is very subtle and is not easy to diagnose in the early stages as it happens so gradually. But later in life, the irreversible damaging affect is likely to be chronic and profound.

Accordingly, the primary assertion in this book is, if LEDs are not banned, altered, substantially filtered or modified from their present form, in the near, foreseeable future, the rapid, planned conversion of the whole world to LED lighting by 2020, could easily become, by far, the most tragic curse on general human health and eyesight in world history.

CHAPTER ONE

HISTORY OF LIGHT BULBS

Prior to the relatively recent discovery of electricity and electric light bulbs in the early 1800s, for thousands of years mankind simply used primitive candles made from tallow and fat, crude oil lamps, torches and cressets (hanging lamps) for illumination. In little more than just the last two centuries, the invention of electricity and electric light- bulbs has created a revolution that has literally transformed the world.

A study of the history of light bulbs is not only a composition of historical facts about light bulb development, manufacture and marketing, but in a much deeper sense, it also encompasses the history of global big business as well.

The reason for this is that right from the very beginning of commercial light bulb development and production some of the world's richest families, banks and companies were involved. They remain so today, and most of these early light bulb manufacturing companies have, in less than 200 years, grown into some of the biggest and most powerful multinational corporations on earth, even indirectly controlling countries and governments.

Unfortunately, some of these incredibly powerful individuals and companies are also among the most corrupt. Gradually, over the last 100 years or so, they have formed themselves into a giant, global light bulb mafia cartel to protect their financial interests and massive businesses.

Today, this has all culminated in the formation of an enormously powerful global group called, **The Global Lighting Association,** which represents over 5,000 multinational lighting manufacturing companies around the world, the leaders of whom have developed a whole host of incestuous relationships with global agencies like the UN, EU, US Government, governments, universities, scientists, doctors, professional associations etc. – thus truly transforming the group into a ruthless gang the author refers to as the 'light-bulb mafia.'

In a sense, as the reader will see, this first chapter entitled, HISTORY OF LIGHT BULBS could be better titled, 'HISTORY OF THE LIGHT BULB MAFIA,' which is definitely more appropriate. But to be polite, we shall stick to the former. So let's begin.

1800: Alessandro Volta

Alessandro Volta demonstrated how a glowing wire could produce light in 1800. There were many other inventors like him around this period conducting similar experiments setting forth the ground work for creating the first light bulb.

1802: Humphrey Davy

When we refer to the invention of light bulbs, Thomas Edison's name immediately comes to mind. Yet electric lighting is far older. It really first began in London in 1802, when the electrochemist Humphrey Davy, in a lecture showed how to cast light by passing an electric current through a platinum strip. In 1809 he demonstrated how to impose a large voltage across the air gap between two carbon electrodes to create a brilliant light. These early

bulbs had very short life spans and were not at all commercial as they consumed too much energy.

1878: Thomas Edison

Many other designers of primitive incandescent lamps followed. But it wasn't until Thomas Edison (1847 – 1931) born in Ohio, USA, found a way to mass produce them that their commercial use began. By October 1879, Edison's team had produced a light bulb with a carbonized filament of uncoated cotton thread that could last for 14.5 hours. They continued to experiment with the filament until settling on one made from bamboo that gave Edison's lamps a lifetime of up to 1,200 hours and this became the standard for the next 10 years. Following this he developed the base of the bulb called the Edison screw, still a standard for light bulbs to this very day.

In 1878, Edison formed the Edison Electric Light Company in New York City with several financiers, including J.P. Morgan and the members of the Vanderbilt family.

In 1880, when he installed his complete lighting system on the steamship *Columbia,* he proved that he could not only supply the public with cheaper, longer-lasting light bulbs than anyone else but he could provide a complete electrical supply system to run them as well. Edison's contribution to electric lighting wasn't its invention, but its development.

In the early stages there was heated debate on whether Edison's light bulb patents infringed on other inventor's patents. Eventually, Edison's U.S. Lighting Company merged with the Thomson-Houston Electric Company to form General Electric, now the fourth biggest company in the world.

1878: George Peabody and John Pierpont Morgan

With the formation of the Edison Electric Light Company in New York in 1878, largely funded by J. P. Morgan, it is important at this juncture to highlight that even at this early date the epicentre of financial power in the US light bulb industry, through J.P. Morgan, was clearly not in USA, but indirectly in London.

George Peabody (1795 – 1869) was born in Massachusetts. In 1816 he moved to Baltimore where he lived for 20 years, becoming a financier and trader, importing dry goods from Britain. In 1827, for business reasons, he made regular trips to the United Kingdom to trade and arrange finance, later setting up the banking firm of George Peabody & Company in London in 1835. This was largely funded by N.M. Rothschild & Sons and other large City of London Corporation Jewish banks linked to the Bank of England. He took up permanent residence there in 1837. While growing this premier British funded American bank in London, Peabody took an American, Junius Spencer Morgan (father of John Pierpont Morgan) into partnership in 1854 to form Peabody, Morgan & Co. and the two ran the business until Peabody's retirement in 1864.

In 1857, J. P. Morgan (son) joined the London branch and in 1858 he moved to New York to join the banking house of Duncan, Sherman & Company, the American representatives of George Peabody and Company in London. From 1860 to 1864, as J. Pierpont Morgan & Company, he acted as agent in New York for his father's and Peabody's firm, renamed J. S Morgan & Co upon Peabody's retirement in 1864. From 1864 to 1872, he was a member of the banking firm, Dabney, Morgan, and Company. In 1871, he partnered with the Drexel family of Philadelphia to form the New York firm of Drexel, Morgan & Company. After the death of Anthony Drexel, the firm's name was changed to J. P. Morgan & Company in 1895.

Apart from funding Edison Electric Light Company in 1878, in 1900 Morgan invested $150,000 in inventor Nikola Tesla's Wardenclyffe Tower, a high power transatlantic wireless communication project, which was never completed. By 1910, Morgan controlled a large part of the wider US economy.

Today, the massive, global, multinational, merchant banks such as Morgan Grenfell (now part of Deutsche Bank, the biggest bank in Germany), JPMorgan Chase and Morgan Stanley all trace their roots and funding back to Peabody's bank in London. To commemorate George Peabody's work in giving British banks control over the United States financial system through funding New York City banks and corporations in the 1800s, Peabody was made a Freeman of the City of London in 1862. He became the first of only two Americans ever to receive this high award, the other being Dwight D. Eisenhower. Today there is a statue of Peabody next to the Royal Exchange in London.

1892: General Electric (GE)

In 1889, Drexel, Morgan & Co, a company founded by J.P. Morgan and Anthony J Drexel, financed Edison's research and helped merge the companies to form Edison General Electric Company, incorporated in New York, 24 April 1889. In 1892, with the help of Drexel, Morgan & Co., Edison General Electric Company of Schenectady, New York, and the Thomas–Houston Electric Company of Lynn, Massachusetts merged to create General Electric (GE) as it remains today, headquartered in Fairfield, Connecticut. Today, among other things, it is one of the world's biggest producers of light bulbs. In 2013, it had 305,000 employees, revenue income of $US146 billion and assets of $US656 billion. In 2011, *Fortune* ranked GE the 6th largest firm in the US, as well as the 14th most profitable.

The six reactors in the 2011 Fukushima I Nuclear Power Plant catastrophe were designed by General Electric and Ebasco, formerly owned by GE. Concerns about the design safety of these reactors were made as far back as 1972. Similar designed reactors by GE are still operating in the US, one being the Pilgrim Nuclear Generating Station in Plymouth, Massachusetts. In December 2011, the organization *Public Campaign* exposed GE for spending $US84.35 million on government lobbying, laying off 4,168 workers since 2008, and in 2010 increasing executive pay by 27% to $US75.9 million for the top 5 executives.

1904: European Inventors of tungsten filament

The next big change in the incandescent bulb came with the invention of the tungsten filament by European inventors in 1904. These new tungsten filament bulbs lasted much longer and had a much brighter light.

1907: Discovery of Electroluminescence as a phenomenon (LEDs)

In 1907, "electroluminescence" as a phenomenon was discovered by the British inventor H. J. Round at Marconi Labs using a crystal of silicon carbide and a cat's-whisker detector. Twenty years later, in 1927, the Russian scientist and inventor, Oleg Losev, created the first LED. His research was distributed in Russian, German and British scientific journals, but his design was never developed any further for many years.

In the 1950s Rubin Braunstein working for the Radio Corporation of America produced infrared emission from gallium arsenide and other semiconductor alloys. In 1961, while working at Texas Instruments in Dallas, James R. Biard and Gary Pitman discovered that gallium arsenide emitted infrared light when an electric current was applied. Following this the first visible-spectrum (red) LED was developed in 1962 by Nick Holonyak, Jr at General Electric.

In 1968, Monsanto Company, (through its subsidiary, Monsanto Electric Materials Company (MEMC) established on August 6, 1959 – from May 30, 2013 now called SunEdison) became the first company to start the mass production of (visible) light emitting diodes (LEDs) using gallium arsenide phosphide. This ushered in the new global era of solid-state lighting. From 1968 to 1970 sales doubled every few months. Most early LEDs were used as indicator lamps for electronic devices.

The first high-brightness blue LED was demonstrated by Shuji Nakamura of Nichia Corporation in 1994. In 2001, processes for growing gallium nitride LEDs on silicon were successfully demonstrated. In 2012, Osram demonstrated high power LEDs grown on silicon substrates commercially. This led the way for the full scale global marketing of blue-white LEDs today (2014) used in commercial and residential lighting products.

1913: International Commission on Illumination (CIE)

In 1913, pushed largely by British financial interests, the International Commission on Illumination (CIE), or known by its French name *Commission Internationale de l'éclairage,* was established to replace its predecessor, the *Commission Internationale de Photométrie,* to help standardize global illumination standards. It is the oldest and only international organization which is devoted to worldwide cooperation and exchange on all matters related to global lighting, colour and vision, photobiology and image technology standards. Today it is based in Vienna, Austria, and has representatives from most leading countries as members of its General Assembly. www.cie.co.at

The Global Lighting Association (GLA) or more correctly, the 'Global Lighting Mafia' cartel representing over 5000 lighting companies and corporations worldwide, signed a collusive partnership agreement to secretly team up with the CIE in May 2013. http://www.globallightingassociation.org/library See PDF titled, 'Global Lighting Association Teams with the International Commission on Illumination.'

Today the chief financial Supportive Members of CEI are among the same 'mafia' multinational lighting companies that are members of, and control, the Global Lighting Association. The GOLD supporting members are: Osram GmbH (Germany), Philips Lighting (Netherlands). The SILVER supporting members are: Instrument Systems GmbH (Germany), Zumtobel AG (Austria), Schréder Group GIE (Belgium), Ocean's King Lighting Science & Technology Co. Ltd (China). The BASIC supporting members are: Sensing (China), CEMDAG (Turkey), Gaash Lighting (Israel), Fagerhult (Sweden), 3M (Germany), Perth y Lopez (Mexico), LED Roadway Lighting Ltd (Canada), Gooch & Housego Optronic Laboratries LLC (USA), Lisun Electronics Group (China). http://www.cie.co.at/index.php?i_ca_id=238

1913: Irving Langmuir

In 1913, Irving Langmuir discovered that by placing an inert gas like nitrogen inside the bulb doubled its efficiency. It also greatly increased the bulb's lifespan.

Following this invention, the life of incandescent light bulbs improved to last many thousands of hours. As at 2010, the oldest lamp in the world, was 'Centennial Light' that had been in use for 108 years, actually made before Langmuir's invention. Many of these early 'ancient' light bulbs would last 25 to 50 years and there are still some in use today. Some light bulbs produced in Britain around WWI and WWII may still be found in use today.

But this created a problem. If these light bulbs would last for such a long period, soon the market for them would be saturated and the production and profits from the factories

manufacturing them would collapse. So a new strategy of production and marketing was needed – planned obsolescence!

1921: INTERNATIONALE GÜHLAMPEN PREIS-VEREINIGUNG (I.G.P)

In the early 1900s huge battles over patent rights and market pricing of tungsten filament light bulbs developed which led to syndication and cartelization of the global business to help solve problems of competition driving down prices. Out of these earlier syndicates arose a bigger cartel established by Osram in 1921 called I.G.P. This lasted for about 3 years until it was dissolved in 1924 when, because of an increasing overlap with competitors outside the cartel, representatives of companies such as German Siemens, Dutch Osram, Dutch Philips and American General Electric, among others, worked up a new set of agreements.

1924: Phoebus Cartel

So, in December 1924, a new global cartel was created in a back room in Geneva establishing a new Swiss corporation to run it, *Phoebus S. A. Campagnie Industrielle pour le Developpement de l' Eclairage.* This organization is commonly referred to today as the Phoebus Cartel, appropriately named after the pagan Greek sun-god *Phoebus*, sometimes called *Phoebus-Apollo*. In Greek, the name literally means 'the radiant one.'

Some of the members of Phoebus were: Osram (Germany), Philips (Holland), Tungsgram (Hungary), ELIN, Siemens (Germany), Compagnie des Lampes (France), International General Electric (USA), Associated Electrical Industries (UK) GE Overseas Group, Società Edison Clerici (Italy) to name just a few.

These companies held shares in Phoebus in proportion to their lamp sales. The original Phoebus agreement was intended to last up until 1955, but the start of WWII in 1939 largely disrupted the cartel.

http://en.wikipedia.org/wiki/Phoebus_cartel http://youarebeingmanipulated.com/cartel-monopolies-price-manipulation-part-3/ http://fairfieldproject.wikidot.com/phoebus-cartel

A good, recent, outstanding documentary about the Phoebus cartel and its devious policy of "planned obsolescence" by global corporates is a film titled, *The Light Bulb Conspiracy.* It is well worth watching: http://www.youtube.com/watch?v=vfbbF3oxf-E)

Up until 1924, many incandescent light bulbs would last 2500 hours or more and many would have a total lifespan of many years. This was not good for business. Once the markets were saturated, demand almost stopped. What Phoebus members felt was needed to stimulate demand and ensure there was a steady market for their products was to introduce a system of planned obsolescence. This came in the form of a conspiracy between all of them to agree, from the end of 1924, to deliberately restrict the total lifespan of their bulbs to a maximum of only 1000 hours.

To ensure all members complied, member's bulbs were regularly tested in an independent laboratory and fines were levied on companies for bulbs that lasted more than 1000 hours. Although Phoebus was effectively disbanded in 1939 as the result of the beginning of WWII, this system of planned obsolescence in the manufacture of light bulbs in the West has continued to the present day.

By comparison, light bulbs manufactured in the USSR and socialist countries that didn't adhere to these corrupt Western standards lasted more than twice as long as their Western

equivalents. In modern China, some Chinese incandescent bulbs still have a life expectancy of 5000 hours or more. The cheap ones are sold to the mugs in the West!

In 1975, a gifted German watchmaker, Dieter Binninger, invented a light bulb with life expectancy of 150,000 hours (or 17 years of continuous use). However, shortly after finding a manufacturer for his bulbs in 1991, Binninger mysteriously died in a plane crash, which was officially regarded as an accident, but many think otherwise. His patent has since disappeared!

After Phoebus broke up in 1939 because of the start of WWII, a number of regional global lighting associations (cartels) developed, culminating in the formation of the massive, Global Lighting Association in 2007, which now represents over 5000 companies worldwide.

1926: Founding of the National Electrical Manufacturers Association (NEMA)

In the fall of 1926, as the American equivalent of the Phoebus light bulb cartel in Europe, the United States light bulb and electrical cartel, National Electrical Manufacturers Association (NEMA) was founded through the merger of the Electric Power Club and the Associated Manufacturers of Electrical Supplies Association. NEMA's website is here: http://.nema.org/About/History/Pages/default.aspx

1930s: Fluorescent Lamps

Both Thomas Edison and Nikola Tesla experimented with fluorescent lamps in the 1890s but neither ever commercially produced them. By the late 1920s and early 1930s, European researchers were doing experiments with neon tubes coated with phosphors (a material that absorbs ultraviolet light and converts invisible UV light into useful white light).

These findings sparked more research programs in the US and by the late 1930s American lighting companies were demonstrating fluorescent lights. These lights lasted longer and were about three times more efficient than incandescent bulbs. By 1951, in the US, more light was being produced by linear fluorescent lamps than incandescent lamps, with fluorescent tubes becoming the standard lighting of choice in offices and commercial areas.

1968: Monsanto Company

The Monsanto Company became the first company in the world to start the mass production of [visible light] light emitting diodes (LEDs), using gallium arsenide phosphide – which ushered in the global era of solid-state LED lighting that we have today.

1976: Edward Hammer at General Electric and early Compact Fluorescent Lamps (CFLs)

In 1976, Edward Hammer at General Electric discovered how to bend the fluorescent tube into a spiral shape, creating the first compact fluorescent light (CFL). These early CFLs were big, bulky and expensive, had a low output with inconsistent performance, and they didn't fit into fixtures well. But they used about 75% less energy and lasted longer than the incandescent bulbs.

2000: Compact Fluorescent Lights (CFLs)

Gradually CFLs were improved to become much less bulky and more acceptable. Because of their superior energy saving characteristics, the global lighting cartels were able to persuade governments to pass new laws to introduce them as "eco-friendly" or "environmentally friendly" substitutes to supposedly reduce global warming, restrict the global carbon footprint, and mandate the outlaw of "wasteful, inefficient, hazardous," incandescent light bulbs.

2004: The Climate Group

Founded in 2004 by Steve Howard and headquartered in London, The Climate Group is an enormously powerful non-profit organisation and coalition of over 80 of the world's biggest companies and banks, controlled from the City of London Corporation. The Group, in turn, has alliances with other leading global groups and governments whose primary aim is to privatise the assets of the world, then set up a world government through the deceptive policy of what they refer to as 'Sustainable Development.'

This powerful organisation works closely with groups such as WWF, Earthwatch, the Smithsonian, International Emissions Trading Association, the Carbon Disclosure Project, the New York Academy of Sciences, the United Nations Foundation, the German Marshall Fund, the Office of British Prime Minister, the EU and the World Business Council on Sustainable Development.

It is The Climate Group, above all, that is at the very head of the plan behind the scenes that is spearheading the transformation of the whole world towards LED lighting. This is being done through ***The LED Program*** initiative, which aims to accelerate the global widespread adoption of LED lighting to reach at least 25% or more of all indoor and outdoor lighting by 2020.

This group's initiative called ***The EV20 Program*** is also the presiding power behind building the momentum of the global electric vehicle market through partnerships with car and battery manufacturers, electricity utilities, financial institutions and governments. It also, indirectly, supervises and funds (through its banking members) the global lighting policies of the massively powerful Global Lighting Association.

2007: Global Lighting Association

Originally founded in 2007 as the Global Lighting Forum, the new Global Lighting Association is now one of the biggest and most powerful mafia-like cartels in the world. Indeed, a much more apt name for it should be either the 'Global Lighting Cartel' or 'Global Lighting Mafia.' The association represents over 5000 major lighting manufacturers producing over $50 billion-plus in annual sales throughout the globe.

This incredibly powerful Global Lighting Association (GLA) is an 'association of associations' now representing all the regional light manufacturing companies and associations of the world. Among its biggest members are: The European Lamp Companies Federation (ELC), the US-based National Electrical Manufacturers Association (NEMA) and Japan Electric Lamp Manufacturers Association (JELMA) and many others.

A good example of the GLA's enormous power, for example, is to view US-based NEMA's official website and view the huge numbers of US corporations it alone represents: http://.nema.org/about/pages/members.aspx

2009: United Nations Environment Programme (UNEP) Global Environment Facility (GEF) *en.lighten initiative*

Following the founding of the Global Lighting Association (GLA) in 2007 to become a true global cartel and light bulb mafia organization controlling, for the first time in human history, virtually every light bulb manufacturer on earth – policies were soon implemented by the GLA to force the entire globe to adopt LED lighting through the United Nations Organization.

Accordingly, the UNEP Global Environment Facility ***en.lighten initiative*** was established under the direct control of the (GLA) with the UN Secretary General's Sustainable Energy for All (SE4ALL) Initiative, in 2009, to accelerate the global market transformation to "environmentally sustainable energy efficient lighting technologies," promoted by the multinational lighting companies, as well as to develop strategies to phase out "inefficient incandescent lamps" to supposedly "reduce CO2 emissions and the release of mercury from fossil fuel combustion."

The *en.lighten initiative* is a massive, global, public/private partnership in itself, between the United Nations Environment programme, Osram and Philips Lighting, with the support of the Global Environment Facility (GEF) based in Washington D.C. The GEF was founded in 1991 as a $1 billion pilot program in the World Bank to promote the funding of UN environmental Sustainable Development (essentially the worship of mother-nature) policies around the world in conjunction with big business.

The GEF unites 183 countries with international institutions like the UN to propagate Sustainable Development initiatives implementing conventions such as the Convention on Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC) and the Stockholm Convention on Persistent Organic Pollutants (POPs) etc.

Since 1991, the GEF has provided $11.5 billion in grants and leveraging and $57 billion in co-financing for over 3,215 projects in over 65 countries. There are 10 GEF agencies: United Nations Development Programme, United Nations Environment Programme, World Bank, UN Food and Agriculture Organization, Inter-American Development Bank, United Nations Industrial Development Organization, Asian Development Bank, African Development Bank, European Bank for Reconstruction and Development and International Fund for Agricultural Development.

http://en.wikipedia.org/wiki/Global_Environment_Facility

In 2011, The National Lighting Test Centre of China became a partner of the UNEP Global Environment Facility *en.lighten initiative* and the Australian Government joined in 2013 to implement its policies and expand them into other developing countries in Southeast Asia and the Pacific.

A full list of the many sponsors of the global UN *en.lighten initiative* may be seen here on its official website based in Paris: http://www.enlighten-initiative.org/About.aspx Of course, the big, global mafia players are there too – including the Global Lighting Association and the Global Off-grid Lighting Association.

2009: OECD - International Partnership for Energy Efficiency Cooperation

The Organization for Economic Cooperation and Development (OECD) (originated in 1948 as the *Organisation for European Economic Cooperation (OEEC)* to help administer the Marshall Plan) was established in Paris in 1961 by international financiers to stimulate economic progress, world trade and operate within the framework of UN agencies.

In 1974, in the wake of the 1973 oil crisis, the OECD established the *International Energy Agency (IEA)* in Paris with the broad role of promoting alternate energy sources including renewable energy and multinational energy technology cooperation. In 2009, the OECD established the *International Partnership for Energy Efficient Cooperation (IPEEC)* to be linked with the IEA to more specifically be tasked with the job of helping facilitate cooperation to improve energy efficiency gains across all sectors of the globe. All countries that are members of the OECD are bound to implement OECD, IEA and IPEEC

recommendations including the promotion of renewable energy, development of energy storage technologies, carbon capture and energy efficiency, including energy efficiency light bulbs.

The Executive Director of the OECD's International Energy Agency (IEA) is Maria van der Hoeven who previously served as The Netherlands Minister of Economic Affairs (February 2007 to October 2010). She often attends global energy summits as a speaker with Harry Verhaar, the head of the Global Off-grid Lighting Association, head of Global Public & Government Affairs for Philips Lighting (The Netherlands).

For example, she joined Harry as a speaker at the World Energy Summit (WES) at Abu Dhabi in 2013:

http://www.worldfutureenergysummit.com/summit/wfes-2013-speakers.aspx

Representatives from the global light bulb cartel saturate virtually all these sorts of powerful global agencies.

2010: Zhaga Consortium

The Zhaga Consortium was founded in 2010 as an industry-wide collaboration of companies around the globe that are developing interface specifications for LED light sources and interchangeable LED light engines. Members include luminaire manufacturers, LED module makers, suppliers of materials and components, and testing laboratories. Membership includes several hundred companies.

On May 28 2013, Zhaga and Global Lighting Association (cartel) signed a Liaison Agreement to work together toward converting the world to LEDs. (See copy of press release on PDF in Library of GLA's website)

A list of their members is here: http://www.zhagastandard.org/about-us/our-members/

2012: Global Off-Grid Lighting Association (GOGLA) – Harry Verhaar & Prince Charles

Formed in 2012, as a public-private partnership and funded as a joint initiative by the leading global light bulb corporations, multinational banks and companies, the World Bank and International Financial Corporation, the Global Off-grid Lighting Association (GOGLA) was primarily established to act as an industry advocate, with the UN and other key global agencies, to focus on small and medium enterprises in developing, emerging markets. These markets include over one quarter of the world's population that lives without access to electricity.

The President of the Global Off-grid Lighting Association is Harry Verhaar, the current Head of Global Public & Government Affairs for Philips Lighting (The Netherlands). http://global-off-grid-lighting-association.org/ He is an active member of The Climate Group, World Green Building Council, World Business Council for Sustainable Development (WBCSD), Prince of Wales Corporate Leadership Group on Climate Change, several UN organizations and is a member of the Advisory Board of the Lisbon Council.

The WBCSD originates from the UN Rio de Janeiro Earth Summit of 1992, when Stephen Schmidheiny was appointed Chief Advisor for business and industry to the Secretary General of the United Nations Conference on Environment and Development (UNCED). From this Summit, he later founded the Business Council for Sustainable Development.

The WBCSD was founded in 1995 through the merger of the Business Council for Sustainable Development and the World Industry Council for the Environment. It is based in Geneva, Switzerland with an office in Washington, D.C. The WBCSD is now a CEO-led global

association of over 200 multinational companies committed to implement Sustainable Development.

These giant companies, in turn, are members of either the UK or EU branches of the enormously powerful Prince of Wales Corporate Leaders Group on Climate Change, http://en.wikipedia.org/wiki/Bali_Communiq%C3%A9 or the International Business Leaders Forum http://www.iblf.org , headed by Prince Charles, which indirectly controls the policies of virtually every major bank and multinational company in the world – including the Sustainable Development and Climate Change policies of the UN.

- Harry Verhaar, as President of the Global Off-grid Lighting Association, through the Climate Group, WBCSD, World Green Building Council, Prince of Wales Corporate Leaders Group on Climate Change (linked to the International Business Leaders Forum headed and founded by Prince Charles) is, effectively, personally responsible for the entire global strategy, outreach and stakeholder management on energy and climate change, resource efficiency and sustainable development, to implement the LED lighting revolution throughout the world.

- ***In a mysterious way, although extremely esoteric and difficult to comprehend for most, Prince Charles is, in fact, the one at the very top of the LED light bulb pyramid. In a profound sense, he is become the 'World LED Light Bulb Prince.'***

- What is in reality happening, is that the world's wealthy, fascist, oligarchical elite, (in collusion with multinational corporations, banks, UN agencies etc. with members of the Global Lighting Association and Global Off-grid Lighting Association) are using lies about environmentalism, climate change, global warming, and sustainable development etc. as a subtle form of DECEPTION and excuse – not to save the earth or protect the environment at all as they publicly claim – but to insidiously eliminate personal freedoms and private property rights from the public, while they increasingly monopolize the whole world's resources, means of commercial production, distribution, and consumption in their relentless lust for money and power as they rapidly increase their ownership of the assets of the world – ultimately, to form a global fascist dictatorship and government.

2013: Global Lighting Association Teams with Global Off-grid Lighting Association

Finally, to complete the light bulb cartel's ring of global power, on a scale never ever seen before in world history, on September 2, 2013, the Global Lighting Association (GLA) signed a historic partnership agreement with the Global Off-grid Lighting Association (GOGLA) – to ensure that LED lighting technology is soon to be thrust upon the whole world. http://www.globallightingassociation.org/library (See: GLA library PDF, 'GLA and GOGLA Sign Partnership Agreement').

The President of the Global Lighting Association is Jan Denneman, who is also Vice President of Philips Lighting (The Netherlands) – and the President of the Global Off-grid Lighting Association (GOGLA) is Harry Verhaar, who is Head of Global Public & Government Affairs for Philips Lighting (The Netherlands).

A full corporate membership list of the Global Lighting Association may be seen here: http://www.globallightingassociation.org/members

To implement LED lighting on the world, the Global Lighting Association has set up two special committees – an Environmental Committee and a LED Committee. The Environmental Committee's job is to use environmental and health-related issues (more correctly, fascist propaganda) to sell LEDs, and to persuade governments to legislate for

LEDs, while encouraging states to ban all incandescents. The LED Committee's main job is to promote Light Emitting Diode (LED) and Organic Light Emitting Diode (OLED) technology at a global level in order to quickly accelerate the uptake of LED lighting. http://www.globallightingassociation.org/committees

2014: Global Lighting Association's fascist power behind secret plan for: BANNING CERTAIN LIGHT BULBS and requiring a GLOBAL BUILDING CERTIFICATE OF FITNESS for all commercial buildings and houses

Previously, the author mentioned in sub-section '2012: Global Off-grid Lighting Association (GOGLA)', that the world's wealthy, fascist, oligarchical elite in collusion with the world's light bulb manufacturers, biggest multinational banks and corporations, through the World Business Council for Sustainable Development (WBSD), Prince of Wales Corporate Leaders Group and Prince Charles' International Business Leaders Forum (IBLF) – are using lies about environmentalism, sustainable development, global warming and climate change as a subtle strategy of deception to eliminate personal freedoms and private property rights to monopolize the global means of production, distribution and consumption – as they increase their ownership of the assets of the world.

That's what the banning of incandescent light bulbs and the requirements for building certificates of fitness for all commercial and residential buildings are all about.

By coercion and deceit, this enormously powerful light bulb mafia, through their control of the International Commission on Illumination (CIE) based in Vienna, Austria http://www.cie.co.at/ , their Global Off-grid Lighting Association (GOGLA) based in Munich, Germany http://global-off-grid-lighting-association.org/ , their Global Lighting Association (GLA) based in Brussels, Belgium http://www.globallightingassociation.org/ , the United Nations Framework Convention on Climate Change (UNFCCC) policies and other UN agencies – they are insidiously manipulating entire governments, politicians and bureaucrats all around the world – to pass controversial legislation to ban light bulb products that they now consider are "unprofitable," to implement draconian new laws which will force entire nation states, commercial enterprises, and the general public at large to comply with and buy their most profitable products.

The following are just a few, very brief examples of the fascist/socialist policies being rapidly implemented by governments in collusion with these powerful light bulb companies, which illustrates the enormous extent of what's happening:

European Union energy label: In 1992, EU Directive 92/75/EC established an energy consumption scheme following other directives, forcing most products like cars, white goods and light bulb packaging to have an *EU Energy Label* clearly displayed when offered for sale or rent. This early directive was replaced by Directive 2010/30/EU which took effect from July 31, 2011. In these directives all light bulbs were to be graded according to electrical power consumption into a set of energy efficiency classes from A to G. Since September 2009, all household lamps had to be class A, which effectively meant that virtually all incandescent bulbs had to be banned. The requirements are extensive. See: http://en.wikipedia.org/wiki/European_Union_energy-label

On 16 January 2012, the EU adopted the Delegated Regulation (EU) No 244/2012 supplementing Directive 2010/31/EU on the energy performance of buildings. On 28 June 2013, the EU Commission published a report on progress by member states towards *Nearly Zero-Energy Buildings (NZEB),* which regulations are to become the norm for all new

buildings in the EU by the end of 2020, and two years earlier for public buildings. This report is largely based on the information contained in the national plans for NZEB's submitted by eight EU member states including Germany, The Netherlands and the UK, (the major centres of power of the light bulb manufacturers). The essence of this report is that the planned changes have to be speeded up to ensure their longer-term climate objectives are not jeopardised.

Germany: Building Energy Certificate: Based on these EU directives and energy performance regulations for buildings, Germany has begun to require all buildings to have an *Energy Certificate (Energieausweis)* whenever they are sold or leased. Residential buildings built before 1965 needed to have certificates commencing July 1, 2008. All other residential buildings needed to have a certificate after January 1, 2009, and office and other non-residential buildings July 1, 2009. There is no actual requirement that all existing buildings must have a current Energy Certificate, but the buildings cannot be sold or rented out (or even an apartment, office, etc. within it) if they do not have one. http://www.howtogermany.com/pages/energycertificate.html

United Kingdom: Decent Homes Standard: The UK Government in 2000 set out a target that it said would 'ensure that all social housing meets set standards of decency by 2010.' This was part of the Decent Homes Programme brought in by the Fabian Socialist Blair-Brown Labour government. Ultimately, these programmes will lead to a "certificate of fitness" for all housing. Within the Commonwealth of Nations, headed by the Queen, Australia and New Zealand however, are among the most compliant.

New Zealand: Warrant of Fitness for Housing: At present (July 2014), the National-led government of PM John Key is in the process of imposing a strict requirement that all publicly and privately-owned rental housing will require a Warrant of Fitness before it can be rented. The programme is proposed to be enforced by an army of city council bureaucrats who will have a list of 31 individual assessment items to check. Among these, are questions like: Is the hot-water at the tap 55°C (±5°C?) (Yes/No); Is there adequate indoor lighting? (Yes/No); Does the house have ceiling insulation to WOF standards? (Yes/No); Is there adequate lighting near entrance ways? (Yes/No) etc. Most believe this programme is only initially being proposed for rental houses, but it will inevitably apply for all houses. During these checks, ultimately, if you have banned incandescent light bulbs in your light fittings you will not get a WOF. On top of this, inappropriate un-flued gas heaters, non-compliant open fires and wood-burners will be outlawed. Similar to Germany, if you are a landlord you will not be able to rent or sell your house without a Warrant of Fitness. The New Zealand Government is simply implementing policies developed by the Global Lighting Association, UN, EU and OECD. See articles: http://www.interest.co.nz/print/67862 and http://www.nzcpr.com/nzcpr-campaigns/anti-wof-petition/

Australia*:* Presentation to Global Lighting Association by Lighting Council Australia: On 9 October 2012, a secret lighting plan for Australia was presented to the Global Lighting Association at a conference in New Delhi by Lighting Council Australia to: 1) Set a timeframe for phasing-out inefficient light bulb types like incandescent and halogen lamps and phase-in efficient LED lighting. 2) Set specific performance requirements for LEDs. 3) Set dates for phasing out CFLs and mercury-containing lamps with their disposal. A copy of that 16-page presentation is held in the Global Lighting Association's website library: http://www.globallightingassociation.org/library (Search 'GLA papers & publications' – PDF Presentation to GLA on Australia).

The Australian Federal and State governments are all working hand in hand with Lighting Council Australia, the Global Lighting Association, the UN, and OECD agencies to convert the entire country to energy efficient LED lighting. Ultimately, the transformation is going to cost the country billions, which in turn will end up in the pockets of the global light bulb mafia. The process involves numerous "green" energy incentive schemes, rebates, grants and subsidy programmes too extensive to list in this book, but some may be seen here:
http://australia.gov.au/topics/environment-and-natural-resources/energy-efficiency
http://www.enlighten.co.au/solutions/rebates-grants-and-incentives
http://www.ledlightingaust.com.au/government-grants-led-lighting-australia/

The City of Sydney, with its 41 councils, is undergoing the first major radical transformation in Australia to convert to LED street lights and park lights. New York, London and Hong Kong have joined Sydney in this trial arranged by ***The Climate Group***. The conversion of Sydney started around March 2012 and is expected to conclude in 2015. http://www.cityofsydney.nsw.gov.au/vision/sustainable-sydney-2030/sustainability/carbon-reduction/led-lighting-project

As previously mentioned, *The Climate Group* was founded in 2004 by Steve Howard to engage major multinational banks and corporations (including the light bulb mafia) and sub-national governments to combine to take action on reducing greenhouse gas emissions, global warming and climate change. The Climate Group, in more ways than one, could today be described as a modern fascist form of "Himmler's Inner Circle."

As of 2010, The Climate Group coalition included 80 of the world's largest companies and governments (including, for example, the City of New York, Miami, Los Angeles, the State of California, most Canadian and Australian provinces and the City of London Corporation). Funding for The Climate Group comes from business and government members and multinational corporate partnerships.

Major technology programs run by The Climate Group's government and business partners include: **The LED program** to accelerate adoption of LED technology, **The Carbon Capture and Storage program** which develops carbon capture and storage plants in China, India, the US, Europe and Australia, **The Smart 2020 program** which aims to use smart technologies to reduce emissions by up to 15% by 2020, and **The EV20 program** which aims to build the momentum of the electric vehicles market. It also runs other specific initiatives such as **The Greenhouse Indicator,** a weekly indicator of greenhouse gas emissions produced from the generation of energy in Australian states including New South Wales, Queensland, South Australia, Victoria and Tasmania. Emissions are reported in various newspaper publications including the Melbourne based *The Age*. **The HSBC Climate Partnership,** which includes The Climate Group, Earthwatch Institute, Smithsonian Tropical Research Institute and the Worldwide Fund for Nature (WWF), aims to reduce major city carbon emissions, monitor climate change impacts on forests and waterways and empower individuals in the communities and workplaces throughout the world to contribute to climate change action and research.

Dr Steve Howard, who founded The Climate Group in 2004, previously spent 15 years working with major corporations, NGOs and UN bodies on the environment including leading development of WWF's Forest Stewardship Council. He is, or was, a member of Vantage Point Venture Partners Advisory Board and a member of the World Economic Forum's Global Agenda Council on Climate Change.

In late 2010 Dr Howard resigned from The Climate Group, after seven years of service, becoming the Chief Sustainability Officer of IKEA Group in January 2011, based in The Netherlands. http://www.theclimategroup.org/what-we-do/news-and-blogs/the-climate-group-founder-dr-steve-howard-to-step-down-as-ceo-after-seven-years/ The IKEA Group is owned by the Stichting INGKA Foundation, which is a Dutch foundation founded in 1982 by the Swedish multi-billionaire Ingvar Kamprad. There are vast differences in various reports of his wealth because he is very secretive. However, in May 2006, *The Economist* magazine reported that the Stichting INGKA Foundation was the world's wealthiest charity with an estimated value of at least US$36 billion, larger than the Bill & Melinda Gates Foundation (estimated in June 30, 2013 at US$38.3 billion). In October 2012, Ingvar Kamprad was listed as the fifth wealthiest person in the world in the *Bloomberg Billionaires Index*, with an estimated net worth of $42.6 billion. Much of the Stichting INGKA Foundation / IKEA Group's funding streams are split between various UN agencies.

Ingvar Kamprad's Fascist involvement is well recorded. In 1994, the personal letters of the Swedish fascist activist Per Engdahl were made public after his death and it was revealed that Kamprad had joined Engdahl's pro-fascist New Swedish Movement in 1942. Kamprad had raised funds for the group and recruited members for it at least as late as 1945. Exactly when Kamprad quit the group is unknown, but he remained a personal friend of Engdahl until the early 1950s.

While later in his life Kamprad has disassociated himself with the support of fascism and the Nazis, in 2011, journalist Elisabeth Ăsbrink revealed that the Swedish Secret Service created a file on Kamprad in 1943 titled "Nazi" and that Kamprad in an interview in 2010 told her: "Per Engdahl is a great man, and I will maintain that as long as I live." http://en.wikipedia.org/wiki/Ingvar_Kamprad

United States: U.S. Lighting Policy: The Energy Independence and Security Act of 2007 laid out firm legislative changes for the United States under recommendations from the global lighting cartel. This set up strict performance standards similar to the EU and other countries with the main aim to FORCE people to phase out incandescent lighting and replace it with more efficient (and profitable) fluorescent lighting products.

The performance requirements for certain common light bulbs required that these bulbs (in 2008 terms) become approximately 25-30% more efficient by 2012-2014. Effectively this meant that most incandescent light bulbs would be banned.

However, unlike other nations, the United States did have a number of concerned groups who were vehemently opposed to this new, heavy-handed, police-state approach taking away their basic rights even to choose a light-bulb of their choice, so they pressurized the government to repeal some of the requirements.

As the result, the Light Bulb Freedom of Choice Act (or H.R. 849) was introduced on March 1, 2011, by Republican Michele Bachmann of Minnesota, along with eight co-sponsors. Upon being introduced, it was referred to the House Committee on Energy and Commerce. On March 8, 2011, it was referred to the Subcommittee on Energy and Power, where it died.

The United States Environmental Protection Agency (EPA) has set up an Energy Star program based on global lighting industry standards set for other countries, to increase lighting efficiency. In 2013, performance requirements for higher efficiency in light bulbs increased by 40%, effectively banning standard incandescent bulbs, halogens and CFLs, pushing the whole country toward LEDs.

2014 – 2020:

Many of the Global Lighting Association hidden plans for converting the world to LED lighting are to be found in various PDF files in their extensive Library on their website: http://www.globallightingassociation.org/library

United Nations Intergovernmental Panel on Climate Change (IPCC) report, *Mitigating Climate Change*

The IPCC Working Group III, 12th Session, IPPC Plenary 39th Session met at Berlin, Germany 7-12 April 2014 and their controversial report, *Mitigating Climate Change*, was released on Sunday, 13th April 2014.

This radical report set out plans requiring governments to switch from fossil fuels to nuclear, wind and solar energy to [supposedly] avoid a global warming catastrophe in a move costing about £300 billion. The report laid out the pressing need for the world to urgently ditch coal and oil fuels to switch to 'low carbon' green energy and eco-friendly products. The central thrust of the report calls for 'large-scale changes in the global energy system' and increased subsidy for green energy to help countries switch from dependence on fossil fuels. It details the dramatic transformation required to restrict energy consumption and switch to new technologies.

The report was produced by 1250 international experts and approved by 194 governments.

US Secretary of State John Kerry said: "Unless we act dramatically and quickly, science tells us our climate and way of life are literally in jeopardy. Denial of the science is malpractice. There are those who say we can't afford to act. But waiting is truly unaffordable. The costs of inaction are catastrophic."

UK Energy Secretary Ed Davey said: "The risk is too great to stop here. We need a worldwide, large-scale change to our energy system if we are to limit the effects of climate change."

The *Mitigation of Climate Change* report released on April 13, 2014, was the third instalment in the UN climate body's fifth assessment report (AR5). The first two sections have inserted that climate change is "unequivocally caused by humans" and will cause destruction and massive social upheaval if nothing is done to urgently cut emissions. http://www,theguardian.com/environment/2014/apr/13/un-climate-change-report-on-how-to-cut-emissions-live-coverage

The report is nothing less than a concoction of worthless, unscientific claptrap, produced by a highly trained gang of pathological LIARS. Much of it comes from the collaborative work of the United Nations Environmental Programme (UNEP), World Bank, World Business Council for Sustainable Development, Global Lighting Association and Global Off-grid Lighting Association etc. In fact, some of the plans were already being implemented back in early 2013 by the UNEP in collaboration with the Global Off-grid Lighting Association in Kenya with 50 other developing countries. See:

http://www.unep.org/newscentre/Default.aspx?DocumentID=2704&ArticleID=9407

Most governments all around the world have controversially passed measures and time-frames to phase out incandescent light bulbs for general lighting and have them replaced by LEDs. Brazil and Venezuela started in 2005. The EU, Switzerland and Australia started in 2009, Argentina and Russia in 2012, the US, Canada, Mexico, Malaysia and South Korea in early 2014.

The primary excuse being claimed to justify the elimination of individual property rights and civil liberties, by continuing to use 'inefficient light bulbs' by the Global Lighting Association (GLA), Global Off-grid Lighting Association (GOGLA), World Bank, International Finance Corporation, The Climate Group, World Green Building Council, World Business Council for Sustainable Development (WBCSD), UN, Prince of Wales Corporate Leaders Group on Climate Change, International Business Leaders Forum, etc. – is that hundreds of thousands of their leading scientists say there is irrefutable scientific evidence that human release of carbon dioxide, methane, and other greenhouse gasses into the environment are causing irreparable heating of the earth's atmosphere and disruption of the earth's climate, threatening, ultimately, the entire survival of mankind.

As the result, the earth's resources must radically be made more "sustainable" by drastically reducing energy consumption to reduce greenhouse gasses**.**

Of course, this propaganda is all a big lie.

Global Warming Petition Project (Oregon Petition)

Other scientists, over 31,000 of them in the US alone, believe differently. In 1998, Arthur B. Robinson, President of the Oregon Institute of Science and Medicine, circulated a petition called the *Oregon Petition*, and again in 2007, called the *Global Warming Petition Project.* It strongly urges the United States government to completely reject the Kyoto Protocol of 1997 global warming proposals – saying that there is absolutely no convincing scientific evidence that human release of carbon dioxide, methane, and other greenhouse gasses is causing or will, in the foreseeable future, cause catastrophic heating of the earth's atmosphere and disruption to the earth's climate.

Anyone interested can view the full list of the 31,000 scientists on the link below, which has largely been censored from the world public by the multinational cartel-controlled media.

They have all signed a Global Warming Petition here: http://www.petitionproject.org/

Since then, there has been a concerted attack against the Petition to try and destroy its credibility by multi-national big business and government agencies, including the tampering of the Wikipedia listing about it which includes a lot of information denigrating it which is not accurate. http://en.wikipedia.org/wiki/Oregon_Petition

The main purpose of the Petition is to demonstrate that the claim of "settled science" and an overwhelming "consensus" in favour of the hypothesis of human-caused global warming and consequent climatological damage is wrong.

The Petition promotes the truth that no such "consensus" or "settled science" exists among scientists at all.

Very much simplified, basically, what many of these scientists believe is this: Carbon dioxide is not the major greenhouse gas – water vapour is. Carbon dioxide accounts for less than ten percent of the greenhouse effect, as carbon dioxide's ability to absorb heat is quite limited.

Only about 0.03 percent of the Earth's atmosphere consists of carbon dioxide (nitrogen, oxygen, and argon constitute about 78 percent, 20 percent, and 0.93 percent of the atmosphere respectively).

The sun, not a gas, is primarily to blame for global warming – and plays a key role in global temperature variations as well.

In the photosynthesis growing process in plants, they breathe in carbon dioxide (CO2) molecules out of the air and emit oxygen back into the atmosphere.

Reduce carbon dioxide in the atmosphere and you are destroying green plant life. You then are destroying animal life. You are destroying human life.

Fortunately, a few honest, perceptive scientists are getting reported, but not enough.

Climate Scientist Ridicules U.N. Report as Junk

On 4 April 2014, *WND* published an article by Jerome R. Corsi '*Climate scientist ridicules U.N. report as junk: It's an industry that creates vast amounts of money for some people.'* He writes:

"Leslie Woodcock, Professor emeritus of Chemical Thermodynamics at the University of Manchester, says that **global warming and climate change are theories without scientific evidence.** He says an industry has been created on these theories that collect vast sums of wealth based entirely on politics. **There is no scientific evidence that CO2 has increased over the past 100 years.** Furthermore, if it had increased, it would be beneficial to mankind…

Leslie Woodcock, emeritus professor of chemical thermodynamics at the University of Manchester's School of Chemical Engineering and Analytical Science, mocked the terms "climate change" and "global warming" in a scientific critique of the U.N.'s climate fears. Woodcock, a former NASA researcher, said the theory of "man-made climate change" is an "unsubstantiated hypothesis.

Water is a much more powerful greenhouse gas, and there is 20 times more of it in our atmosphere, around 1% of the atmosphere, whereas CO2 is only 0.04 %," he said, according to the *Yorkshire Evening Post* in the UK."

HAARP, Nuclear Depth Bombs & Weather Weapons

If cataclysmic changes to the earth's climate develop in the future, one thing is for certain – such violent upheavals or changes will not come from man-made 'global warming,' 'cow farts' or 'climate change' as the big corporates, UN and aligned government scientists so deceptively claim.

But they may come from man-made sources to be sure! – deliberately created from such hi-tech advanced military weaponry like *the US High Frequency Active Auroral Research Program (HAARP)* ionospheric heating facilities at Alaska and elsewhere http://en.wikipedia.org/wiki/High_Frequency_Active_Auroral_Research_Program or the Russian Sura ionospheric base close to Vasilsursk near Nizhny Novgorod. http://en.wikipedia.org/wiki/Sura_Ionospheric_Heating_Facility It is claimed these military, weather control weapon technologies can heat up the world's ionosphere using huge wattages of high frequency radio waves to change the magnetic fields in the ionosphere above the earth to create increases or decreases in atmospheric pressure and temperature – to create storms, cyclones, hurricanes and earthquakes.

Some Russian scientists actually believe their system has enough power to manipulate the earth's magnetic field so much it can actually drive the earth off its axis.

The Russian, British and US militaries also have developed massive nuclear tsunami depth bombs (NDBs) that have, and still are, being used to create earthquakes and tsunamis.

The idea of building nuclear tsunami depth bombs was first developed with conventional explosives in New Zealand during World War II between Britain, New Zealand and the

United States, headed by an Australian Professor, Thomas Leech, in a secret project named *Project Seal*. http://en.wikipedia.org/wiki/Tsunami_bomb

The Russian, British and American navies have consistently claimed that these weapons were all withdrawn from active service in 1990 but this is simply not so. http://en.wikipedia.org/wiki/Nuclear_depth-bomb

Revelation Chapter 16: The Seven Angels and Seven Vials of Judgment

It is significant that the prophetic book of Revelation in chapter 16 forewarns that there are to be seven angels (messengers) appointed in the last days to pour out the wrath of God upon the earth against all the wicked who have taken the Satanic mark of the beast in their foreheads or right hands for all buying and selling and worshipped his image. (TVs, computer screens, iPhones, iPads, tablets, smart phones all provide a secular "image."). Have you ever seen teenagers worshipping their iPhones or using Facebook?

Six of these vials are poured out in judgment before Christ's second coming (Rev.16:15) and before the final great battle at Armageddon in northern Israel. (Rev.16:16). Each angel is given a specific task and the fourth angel's judgment is particularly nasty and excruciating: *"And the fourth angel poured out his vile upon the sun; and power was given unto him to scorch men with fire. And men were scorched with great heat, and blasphemed the name of God, which hath power over these plagues: and they repented not to give him glory."* (Revelation 16:8-9).

Perhaps, (as they are right now), these imbeciles in their obstinacy and rebellion will continue on to try and blame this coming great heat from the sun on Global Warming and Climate Change as well? Time will tell.

The Final Solution: LEDs

Apart from Climate Change and Global Warming issues, the main objection by the global lighting cartel for specifically banning incandescent and halogen lamps is their poor efficiency and higher operating temperature levels.

For CFLs and other types of fluorescent lamps, the main issue is that they contain small amounts of mercury, a potent neurotoxin, which is especially dangerous to children and pregnant women. Hence LEDs are promoted as the miraculous answer.

Today's LEDs are claimed to be six to seven times more energy efficient than conventional incandescent lights, cut energy use by 80%, have a lot lower fire hazard as they run a lot cooler, will last more than 25 times longer and have no substantive adverse health effects.

In 2012, the industry sold more than 49 million LEDs alone. In 2013 and early 2014 worldwide sales have simply been skyrocketing.

The Global Lighting Association, representing the entire world's lighting industry – with over 5,000 major companies and corporations enlisted, trillions of dollars in assets, billions of profits per year, millions of people employed worldwide including hundreds of thousands of business executives, university-trained professionals, lighting engineers, scientists and doctors – all say LEDs are the only way to go, and they DO NOT have any serious adverse health effects or damaging characteristics.

In the following pages, hopefully, this study will bring out the real truth.

CHAPTER TWO

BRIBERY & CORRUPTION:
THE "BIG THREE" LIGHT-BULB MAFIA MEMBERS

There are over 5000 individual global light bulb manufacturers and lighting companies that are members of the Global Lighting Association (cartel). It would take many volumes to catalogue all of them in an extensive study of their criminal activities, so for sake of brevity, a look at the 'big three' that dominate the industry will suffice.

One of the biggest problems today in bringing multinational criminality to light or to court, or even identifying criminal activities in them, is that most international anti-corruption agencies themselves are corrupt and are in many cases simply legalized 'fronts' to cover-up and protect corporate or government racketeering. This includes even big agencies like the Serious Fraud Office (UK), Federal Bureau of Investigation (FBI), European Commission Anti-Fraud Office (OLAF), Regional People's Procuratorates (China) etc.

Only last year in early August 2013, the Serious Fraud Office bosses in the UK were exposed for using secret emails to cover up £1million pay-offs, and keeping details from Freedom of Information requests and so on. http://www.dailymail.co.uk/news/article-2382901/Bosses-Fraud-Office-used-secret-e-mails-cover-1m-pay-offs-Civil-servants-used-private-addresses-prevent-staff-finding-out.html

U.S. SECURITIES AND EXCHANGE COMMISSION (SEC)

Formed in June 1934, the U.S. Securities and Exchange Commission (SEC) is the agency of the United States government that is primarily responsible for enforcing the federal securities laws and regulating the securities industry, the nation's stock exchanges and corporates.

The SEC's enforcement authority given by Congress allows the agency to bring civil enforcement actions against individuals or companies alleged to have committed accounting fraud or provided false information or other criminal activities. The agency also works with other criminal law enforcement agencies such as the FBI.

Today the agency is recognized by many Americans as a 'revolving door' for political appointees to cover up legalized corruption by big business and bankers. A very good website exposing corruption and corporate fraud cover-up at the SEC is: http://www.softpanorama.org/Skeptics/Financial_skeptic/Casino_capitalism/Corruption_of_regulators/corruption_of_sec.shtml

RollingStone on August 17, 2011, wrote, *"Is the SEC Covering Up Wall Street Crimes? – Matt Taibbi: A whistle blower says the agency has illegally destroyed thousands of documents, letting financial crooks off the hook."* He writes about a SEC attorney and whistle blower named Darcy Flynn who tried to expose some of the SEC cover-ups, involving records of thousands of preliminary investigations that were destroyed or mysteriously went missing. Flynn submitted a list of dead and buried cases to Congress which included banks such as Goldman Sachs (Market Manipulation, Insider Trading), Deutsche Bank (Insider Trading, market Manipulation), Lehman Brothers (Financial Fraud).

http://www.rollingstone.com/politics/news/is-the-sec-covering-up-wall-street-crimes-20110817

But despite the corruption at the SEC, still a few cases do get investigated especially if they are so blatant it is difficult to cover them up.

The SEC is responsible for enforcing the **Foreign Corrupt Practices Act (FCPA)**, enacted in 1977, which generally prohibits the payments of bribes to foreign officials to assist in obtaining or retaining business. The FCPA can apply to prohibited conduct anywhere in the world and extends to publicly traded companies and their officers, directors, employees, stockholders, and agents. Agents can include third party agents, consultants, distributors, joint-venture partners and others.

The sanctions for FCPA violations can be significant. The SEC may also bring civil enforcement actions against violators of anti-bribery or accounting provisions of the FCPA. Companies and individuals that have committed violations of the FCPA may have to disgorge their ill-gotten gains plus pay prejudgment interest and substantial civil penalties. The SEC and the US Department of Justice are jointly responsible for enforcing the FCPA.

More information about the US Securities and Exchange Commission Foreign Corrupt Practices Act (FCPA) is here: https://www.sec.gov/spotlight/fcpa.shtml A list of FCPA Cases 1978 to 2014 is here: https://www.sec.gov/spotlight/fcpa/fcpa-cases.shtml Some of these cases involve major light bulb companies (those cases will be included under their company names following): It is important to appreciate the relatively few big companies prosecuted by the SEC only represent the tip of the iceberg!

GENERAL ELECTRIC (GE)

General Electric, or GE, is a giant, US multinational conglomerate with its headquarters in Fairfield, Connecticut. Originally the Edison Lamp Company founded by Thomas Edison, became Edison General Electric Company which was later merged with Thomson-Houston Electric Company to create General Electric in 1892. Today GE is the oldest company in the Dow, and operates in over 100 countries. The company is listed as the fourth largest company in the world among the Forbes Global 2000. In 2011, *Fortune* ranked GE the 6th largest firm in the US, as well as the 14th most profitable. In 2013 it had total assets of US$656.600 billion, Revenue US$146.045 billion and 305,000 employees. GE's tax return is the largest return filed in the United States. In 2005 the company's tax return was approximately 24,000 pages.

In 1946, General Electric was fined by the US government owing to its nefarious wartime activities. In partnership with Krupp, a large German manufacturing firm, General Electric deliberately and artificially raised the price of tungsten carbide, a material that was vital for machining metals and light bulbs for the war effort. Though only fined $36,000 in total, General Electric made around $1.5 million out of the scam in 1936 alone, hampering the war effort and increasing the cost of defeating the Nazis. GE also bought shares in Siemens before the war broke out, making them complicit in the use of slave labour to build the gas chambers.

In March 2011, *The New York Times* reported that, despite earning $14.2 billion in worldwide profits, GE did not owe taxes in 2010 but got a tax refund of $3.2 billion. In December 2011, the watchdog organization Public Campaign criticized General Electric for spending $84.35 million on lobbying (bribing Washington officials) and increasing executive

pay by 27% to $75.9 million in 2010 for the top 5 executives. GE has the biggest lobbying (bribery) budget in the United States.

On August 4 2009, the SEC fined General Electric $50 million for breaking accounting rules in two separate cases, misleading investors into believing GE would meet or beat earnings expectations.

In 1990 – 1992, GE faced several criminal actions regarding its defense related operations. The company was convicted in 1990 of defrauding the US Department of Defense, and again in 1992 on charges of corrupt practices in the sale of jet engines to Israel. http://en.wikipedia.org/wiki/General_Electric

In 2010, in the General Electric, Ionics Inc. and Amersham plc case, the SEC charged GE and two European subsidiaries (Marquette-Hellige and OEC-Medical Systems) for illegal kickback payments made in the form of cash, computer equipment, medical supplies and services to the Iraqi government in order to obtain UN Oil for Food Program contracts. GE paid $23.4 million to settle the charges under US bribery laws without admitting or denying it was guilty. See: https://www.sec.gov/spotlight/fcpa/fcpa-cases.shtml

In 2009, General Electric CEO Jeffrey Immelt, was Chair of Obama's Job Council. GE is a heavy donor of both Republican and Democrats, and the GE CEO hedges his bets on both sides of the fence. In 2oo8, GE CEO Immelt gave the Obama campaign $528,855, making him a top donor. GE is a major funder in the global Clean-Energy program and President Obama's Green Energy scheme. GE is one of the biggest lobbyists of Congress to expand green energy subsidy programs and now profits from every aspect of them including the manufacture and sale of LED light bulbs, renewable power plant construction, billions of dollars in contracts to sell its turbines to wind farms built with public subsidies.

In late 2009, GE entered the smart meter market as well. Apart from being one of the biggest light-bulb manufacturers in the world and member of the Global Lighting Association, GE has huge numbers of 'green alliances' including the United States Climate Action Partnership, Advanced Metering Partners, Energy Technology Ventures, World Business Council for Sustainable Development (WBCSD) and the list goes on and on.

In return for GE's record lobbying grants, (the official ones that the public knows about that is) GE receives all sorts of government kickbacks. Big tax refunds, Congress approval of many of its products, and preferential treatment in being awarded government contracts. For example, in July 2010, the Department of Energy (DOE) announced that it was providing $30 million for Energy-Efficient Housing Partnerships. GE was on the Building Industry Research Alliance team, one of the biggest recipients. In October 2010, the DOE announced the Third Grant for U.S.-China clean Energy Research Center. Again, GE was a major recipient. During WWII, GE had a business relationship with Tokyo Electric.

GE has a history of being one of the biggest corporate contributors to air and water pollution. The watchdog organization, Political Economy Research Institute listed GE as the fourth largest corporate producer of air pollution in the United States.

In 1983, New York State Attorney General Robert Adams filed suit in the US District Court for the Northern District of New York to compel GE to pay for the clean-up of what was claimed to be more than 100,000 tons of chemicals dumped from their plant in Waterford, New York. In 1999, the company agreed to pay a $250 million settlement in connection with claims that it polluted the Housatonic River in Massachusetts and other sites with polychlorinated biphenyls (PCBs) and other hazardous substances.

From approximately 1947 to 1977, GE discharged as much as 1.3 million pounds of PCBs from its capacitor manufacturing plants at the Hudson Falls and Fort Edward upstate New York facilities into the Hudson River. GE fought a media and political battle to avoid cleaning up the river and countered that dredging the river would actually stir up PCBs. In 2002, GE was ordered to clean up a 40-mile (64 km) stretch of the Hudson River it had contaminated. In 2003, GE was also given orders to clean up a PCPs contaminated site in Rome, Georgia.

The nuclear reactors involved in the 2011 crisis at the Fukushima Daiichi I plant in Japan are GE designs. The architectural designs were done by Ebasco, formerly owned by GE. Concerns over the design and safety of these reactors were raised as far back as 1972, and earthquake or tsunami danger was not incorporated into the design. As of 2014, the same model nuclear power reactors designed by GE are operating in the US, such as the controversial Pilgrim Nuclear Generating Station in Plymouth, Massachusetts.

General Electric is a major global designer and manufacturer of LED light bulbs. Would you <u>trust</u> all of their statements about their LED products?

SIEMENS AG & OSRAM

Founded on 12 October 1847, by Werner von Siemens (1816 – 1892), a gifted German inventor and industrialist, to build the first long-distance telegraph line in Europe, the company, right from its early beginnings, grew at a massive rate. In 1850, the founder's youngest brother Carl Wilhelm Siemens (Sir William Siemens) started to represent the company in London and through his relationship with City of London bankers the company was soon internationalised.

In 1881, it soon diversified into designing and manufacturing the Siemens AC Alternator driven by a watermill to power the world's first electric street lighting in the town of Godalming, UK, design and manufacturing light bulbs and electric trains – to become what it is today – one of the largest electro-technological firms in the world.

Incorporated in 1897, Siemens & Halske (S & H) as it was known then, merged part of its activities with Schuckert & Co., Nuremberg, in 1903 to become Siemens-Schuckert. By 1907, Siemens (Siemens & Halske and Siemens-Schuckert) had 34,324 employees and was the seventh largest company in the German empire by number of employees.

In 1919, S&H and two other companies jointly formed the Osram light bulb company. Today Osram Licht Ag is a large multinational company in its own right, with revenue €5.4 billion and employees 39,000 as at late 2012. On July 8, 2013, Osram was spun off from Siemens and listed on the Frankfurt Stock Exchange as a separate company.

Today Siemens AG is a giant, multinational engineering and electronics conglomerate headquartered in Munich and Berlin, Germany. In 2013, its total assets were €101.93 billion, revenue was €75.88 billion and its employees were 362,000. The von Siemens family still owns 6% of the company shares and holds a seat on the Supervisory Board, being the largest shareholder.

During WWII, Siemens was one of the principal companies working for the Nazis using slave labour in its factories in the morning, only to be snuffed out in a Siemens-made gas chamber in the afternoon. Siemens was forced to settle a $1.2 billion major lawsuit in 1998 brought by Holocaust survivors. On August 26, 2010, the *Financial Times* ran an article, '*MI5 claimed Siemens a cover for Nazi spies.'* The article alleged that Siemens 'was used as cover for Nazi spying and propaganda operations before and during the second world war, according to

claims made in previously secret MI5 files released for the first time …' http://www.ft.com/intl/cms/s/0/dc50c984-b084-11df-8c04-00144feabdc0.html

In January 2007, Siemens was fined €396 million by the European Commission for price fixing in EU electricity markets through a cartel involving eleven companies, including ABB, Alstom, Fuji, Hitachi Japan, AE Power Systems, Mitsubishi Electric Corp., Schneider, Areva, Toshiba and VA Tech. According to the Commission, "between 1988 and 2004, the companies rigged for procurement contracts, fixed prices, allocated projects to each other, shared markets and exchanged commercially important and confidential information." Siemens was given the highest fine of €396 million, more than half of the total for its leadership role in the corruption.

On 15 March 2007, *The Economist* reported about the trial of two former Siemens managers, which began in Darmstadt and was likely to be followed by more spectacular trials in Munich and Nuremberg brought by prosecutors investigating Siemens for alleged corruption. The two former managers were accused of using at least €6m ($8m) of funds stashed in Switzerland and Liechtenstein to smooth the path of power-equipment contracts with Enel, an Italian utility. Both admitted the offence. The article went on to say, "In Brussels Osram, Siemens light bulb subsidiary, is fighting to maintain punitive duties on cheap low-energy light bulbs made in China. Osram, one of the world's biggest bulb-makers, says it wants to ensure "fair" competition. But as part of the group that appears to have been buying advantage for itself, that plea rings a little hollow."

http://www.economist.com/node/8856053

In 2008, it was revealed that Siemens had bribed the two main political parties of Greece for approximately 10-years to be the sole provider of mechanical and traffic light electrical equipment of the Greek state.

In December 2008, in the US, Siemens AG and three subsidiaries pleaded guilty to Foreign Corrupt Practices Act violations and agreed to pay $450 million in combined criminal fines, and together with other coordinated enforcement actions by the DOJ, SEC and German authorities, the total penalties amounted to $1.6 billion.

The lies, conspiracy, bribery, racketeering and extortion of Siemens involved a large number of complex cases. For example, from 2000 to 2002, four Siemens AG subsidiaries – Siemens France, Siemens Turkey, Osram Middle East, and Gas Turbine Technologies S.P.A. (GTT) each owned by Siemens AG or one of its subsidiaries, were awarded 42 contracts with a combined value of more than $80 million with the Ministries of Electricity and Oil of the government of the Republic of Iraq under a UN Oil for Food Program. To obtain the contracts, these Siemens companies paid a total of at least $1,736,076 in kickbacks to Iraqi government officials and the companies collectively earned more than $38 million in profits on those 42 contracts. The process involved inflating the price of the contracts by about 10 percent before submitting them to the United Nations for approval and improperly characterized payments to purported business consultants, part of which were paid as kickbacks to the Iraqi government as 'commissions' to the business consultants. What interestingly came out from the investigations by the US Department of Justice was that most people involved with them reached the conclusion that bribery was rife and standard practice in most multinationals. Siemens' sin, apparently, was that it had been caught.

Fuller documents about these numerous, extensive bribery cases may be seen on the US Department of Justice website at:

http://www.justice.gov/opa/pr/2008/December/08-crm-1105.html

In 2010, as mentioned earlier, GE was also caught doing a similar thing under the UN Oil for Food Program!

Reinhard Siekaczek, a former accountant at Siemens testified that from 2002 to 2006 he oversaw an annual bribery budget of about $40 million to $50 million at Siemens. Company managers and sales staff used the slush fund to cosy up to corrupt government officials worldwide. In Mr Siekaczek's testimony about his own Siemens telecommunications unit, he said in court documents, 'It paid $5 million in bribes to win a mobile phone contract in Bangladesh, to the son of the prime minister at the time and other senior officials.' Mr Siekaczek's group also made $12.7 million in payments to senior officials in Nigeria for government contracts. In Argentina, a different Siemens subsidiary paid at least $40 million in bribes to win a $1 billion contract to produce national identity cards.

In Israel, the company provided $20 million to senior government officials to build power plants. In Venezuela, it was $16 million for urban rail lines. In China, it was $14 million for medical equipment. In Iraq, it was $1.7 million to government officials. SEC officials said Siemens had paid its heftiest bribes in China, Russia, Argentina, Israel and Venezuela.

Mr Siekaczek said Siemens appointed a trustee in Switzerland who set up front companies to conceal money trails from Siemens to offshore bank accounts in Dubai and the British Virgin Islands. The most common method of bribery involved hiring an outside consultant to help "win" a contract.

This was typically a local resident with ties to ruling leaders. Siemens paid a fee to the consultant, who in turn delivered the cash to the ultimate recipient. Siemens acknowledged having more than 2,700 business consultant agreements, so-called B.C.A.s worldwide. Those consultants were at the heart of the elaborate bribery scheme, which covertly sent millions and millions of dollars in substantial bribes to corrupt government officials in virtually all extensive lists of countries in which they dealt.

http://www.nytimes.com/2008/12/21/business/worldbusiness/21siemens.html?pagewanted=all&_r=0

In 2011, after the SEC had charged the seven former Siemens executives for their involvement in the company's decade-long bribery scheme to retain the $1 billion government contract to produce national identity cards for Argentine citizens – On 15 April, 2013, an executive agreed to pay $275,000 to settle the SEC's charges (This sum was in fact a pittance in relation to the incredibly vast sums of bribes involved). https://www.sec.gov/spotlight/fcpa/fcpa-cases.shtml

In March 2014, Brazilian prosecutors charged 30 executives from a dozen international companies with forming a cartel to raise prices for the construction and upkeep of subway and train systems in Sao Paulo. The Press Office of the Sao Paulo State Prosecutor's Office said the companies involved include Siemens of Germany, CAF of Spain, Mitsui of Japan, Bombardier of Canada, Alstom of France and Hyundai Rotem of South Korea. The Prosecutor's Office charged in a statement that the companies engaged in price-fixing and said those that won bids then contracted the losing companies to provide services. Five contracts signed between 1998 and 2008 were being investigated. (*The New Zealand Herald* March 27, 2014).

At the same time, Brazil's antitrust agency began legal proceedings against these, and other major international companies for allegedly forming cartels for the construction and

maintenance of public transportation systems in Brasilia, Belo Horizonte, Porto Alegre and Rio de Janeiro, as well as Sao Paulo.

The Administrative council for Economic Defence, known as CADE, alleged that 18 companies were part of a cartel involving 15 projects valued at US$4 billion. http://www.winnipegfreepress.co/business/brazilian-prosecutors-charges-executives-with-cartel-formation-in-public-transportation-system-252308671.html

As at April 2014, the Chairman of the LED Committee of the Global Lighting Association (GLA) [cartel] representing all the major LED light bulb manufacturers of the world was Wolfgang Andorfer. He is the Senior Director, Solid State Lighting at OSRAM. In addition, he is also a member of the LED Working Group for the European Lamp Companies Federation.

Siemens AG and Osram is a major global designer and manufacturer of LED light bulbs. Would you trust all of their statements about their LED products?

ROYAL PHILIPS N.V.

The Philips Company was co-founded as a family business by two Dutch, Jewish entrepreneurs in May 1891, Gerard Philips and his father Benjamin Frederik David Philips (a tobacco merchant and banker at Zaltbommel in The Netherlands). Here the company started the production of carbon-filament lamps and other electrical products in Eindhoven in 1892. In 1912, the younger brother Anton Philips joined the firm, which was then renamed Philips Light-Bulb-Factory NV.

Part of their family history is interesting. Benjamin Frederik David Philips (1 December 1830 – 12 June 1900) was son of Lion Philips (29 October 1794 – 28 December 1866) who was married to Sophie Pressburg, whose sister, Henriette, was Karl Marx's mother. Sophie and Henriette's mother was Nanette Pressburg, the daughter of Salomon David Barent-Cohen (1732-1804 - born in Utrecht, Holland) a wealthy merchant and financier from the oldest Ashkenazi Jewish family in Britain. Salomon's brother, Levi Barent-Cohen (1747 - 1808) married two sisters (Fanny, then Lydia – maiden surnames: Diamant-Schleifer). Levi and Lydia's daughter Hannah Barent-Cohen (1783 – 1850) married Nathan Mayer Rothschild (16 September 1777 – 28 July 1836), whose banking firm, N. M Rothschild & Sons, at New Court, in the City of London Corporation today, is responsible for "privatising" the entire world.

Thus, to summarize, Karl Marx's grand-mother Nanette Pressburg (Barent-Cohen) and Hannah Barent-Cohen [married to Nathan Mayer Rothschild], were first cousins, and Marx's mother Henriette Marx (Pressburg) and Sophie Pressburg [married to Lion Philips] were sisters. Lion Philips was Karl Marx's uncle and it was Lion Philips' son, Benjamin Frederik David Philips, who, with his son Gerard Philips, founded what has become today – Royal Philips N.V.

This partly, at least, explains why Lion Philips, Karl Marx's uncle, had a very close relationship with Karl. Lion largely provided the funding for Marx to write his radical books, *The Communist Manifesto (1848)* and *Das Kapital (1867-1894)* which have since inspired revolutionary socialism and communism all around the world, including more recently the United Nations Organisation and the EU, which the Royal Philips N.V. group of companies today, just happen, to heavily sponsor and support. (Incidentally, one of the principal authors of the *UN Charter* was a Russian Marxist Jew, Leon Pavalovsky, who worked in the US State Department. He copied most of the Charter word-for-word from the USSR *Soviet Constitution* – Marshalko [1958:229]). Marx frequently wrote to Lion Philips, resided at his

house, and indeed, while he researched his spurious book *Das Kapital* in the British Library in London, he tirelessly worked on it while staying at the Philips home in Zaltbommel. https://groups.google.com/forum/

Today, Royal Philips N.V., headquartered in Amsterdam, Holland, is the biggest lighting manufacturer in the world. In 2012, the company's assets were €29.07 billion with revenue of €24.78 billion, and total employees of about 121,000.

Jan Denneman, Vice President Philips Lighting is, also at the same time, the President of the Global Lighting Association (GLA) – that now represents and controls the activities of over 5000 multinational lighting companies that together control the lighting system of the entire world!

So it's not without significance, that in December 2011, following the United Nations Climate Change Conference in Durban, South Africa, Jan Denneman Vice President of Philips Lighting and Harry Verhaar, Senior Director for Energy and Climate Change / Head of Global Public & Government Affairs at Philips Lighting (who is also the President of the Global Off-grid Lighting Association as well) – called for the rapid switch to LED lighting. http://www.eetimes.com/document.asp?doc_id=1260776&print=yes

Much more recently, on 10 April, 2014, at Amsterdam, The Netherlands, Royal Philips N.V., the global leader in manufacturing lighting, announced that it was to become "the first Patron Sponsor of UNESCO-led **International Year of Light"** [a UNESCO-led initiative – in 2015] "bringing 120 years of expertise and understanding of lighting solutions to improve living standards and people's lives as well as the health of our planet." http://www.newscenter.philips.com/main/standard/news/press/2014/20140410-philips-partners-with-unesco-led-initiative-to-light-up-the-world.wpd

"Frits" Philips: Anton Frederik Philips (14 March 1874 – 7 October 1951), who joined his father and older brother Gerard in the company in 1912, had an only son, Frederik Jacques "Frits" Philips (16 April 1905 – 5 December 2005). Frits Philips was the Fourth Chairman of the Board of Directors and he served as the company president for 10 years from 1961 to 1971. He also managed the company under Nazi occupation during WWII, and in 1996 he was recognised by Yad Vashem in Israel among the *'Righteous Among the Nations'* for his courageous actions saving 382 Jews by convincing the Nazis that they were indispensable for the production process at Philips. He lived to age 100, and was virtually worshipped all his life by citizens of Eindhoven for his apparent civic mindedness and generosity.

But all his life he was involved with and inspired by the **British Oxford Group**, dedicated to a socialist, fascist, world government structure. He was instrumental, as President of Philips, in 1986 of jointly founding the Caux Round Table in Caux, Switzerland, with Olivier Giscard d'Estaing, along with Ryuzaburo Kaku at the time President of Canon.

The Caux Round Table is an international organization for senior business executives aiming to promote ethical business practice. Frits was behind the Caux Round Table publishing an 'international code of good practices' presented to the UN Social Summit in Copenhagen in 1994 – that has since become a standard work, translated into 12 languages, and has been used as the basis for international companies such as Nissan ever since. Today it is an international network of experienced business leaders who advocate a principled approach to global capitalism. http://en.wikipedia.org/wiki/Caux_Round-Table In the business world, this concept has grown into the term, 'Corporate Social Responsibility.' It is widely used and sounds good. But in reality, it is window dressing in an attempt to pre-empt the role of

government as watchdog over powerful multinational corporations and banks that now, in many cases, have more power and bigger budgets than many countries.

Perhaps, Mr "ethical" Frits Philips, who was so highly respected by the citizens of Eindhoven and Holland for so many years may have 'lost his marbles' and conveniently 'forgotten' about the PHOEBUS CARTEL his own company was intimately involved with in 1924? Perhaps, Frits was suffering from acute amnesia later in life, while he claimed he was so enthusiastically "concerned in improving people's lives with the health of the planet" while, at the same time, his company was aggressively participating in widespread conspiracy through the Phoebus cartel and has continued to conspire with global light bulb cartels ever since?

The Phoebus Cartel, from December 23, 1924 until 1939 was a formal agreement, headed by Osram and Philips, with other lighting manufacturers including GE in the US that conspired in a back room in Geneva Switzerland to control the global light bulb business. The cartel introduced the world's first grand-scale system of "planned obsolescence" by deliberately designing incandescent light bulbs to last only a maximum 1,000 hours to maximize sales and profits while previously on average earlier bulbs lasted two or three times that lifespan and some considerably more, 25 to 50 years. Until modern times at least (it may have recently gone out), reputedly the oldest burning lamp in the world, the 'Centennial Light,' had been working for 110 years. It is a four-watt, hand blown, carbon filament, common incandescent light bulb manufactured in the 1890s by the Shelby Electric Company, Shelby, Ohio. The Livermore-Pleasanton Fire Department is responsible for it, where it is located at 4550 East Avenue, Livermore, California.

Before WWI, Philips had problems with GE regarding the use of patents. After the war these disagreements were sorted out which resulted in an agreement in 1919 to respect each other's home markets and to exchange patents and know-how. Philips paid a licence fee to the International General Electric Company and the latter took a 20 percent participation in Philips' enlarged share capital. This participation continued until 1952. After WWI ended, the three Berlin electric lamp manufacturers combined their production of lamps in the Osram Company and it was they, with Philips that inspired the Phoebus cartel in 1924.

The cartel arrangements included not only the introduction of a system of planned obsolescence by deliberately limiting the lifespan of all light bulbs and ensuring products were no longer functional after a predetermined time. It included regional, global production quotas, price-fixing, and exchange of patents and technical knowledge between members. These policies included the levying of fines on members that produced bulbs that lasted more than a maximum 1000 hours. The effects of the Phoebus cartel allowed companies like Philips and Osram to cap the life expectancy of light bulbs, dramatically increase sales and hike-up prices making enormous profits in the process without fear of competition.

Largely as the result of the Phoebus cartel policies in the 1920s, Philips' growth in Eindhoven was spectacular, increasing from a modest 2000 employees in 1922 to 9000 in 1927 and over 23,000 in 1929. Because of the 1929-35 Depression, import tariffs and difficulties, licencing and other strategic reasons, Philips opened production units in Poland, Spain, France, Italy, the UK and Sweden. By 1939, Philips employed 19,000 people in Eindhoven against 26,000 overseas. (Reference: or Google book: *80 years of Research at the Philips Natuurkundig Laboratorium (1914-1994)* by Marc de Vries.

Dutch tax haven at Curacao: The Netherlands were occupied by the Nazis from May 1940. Before that, which the Philips board had anticipated, the directors had already made legal preparations to transfer the seat of the company to Curacao, a principal Dutch tax haven, to bring its British and American activities under separate trusts.

http://books.google.co.nz/books?id=_vauEcpD-okC&pg=PA73&lpg=PA73&dq=Phoebus+cartel-+Philips&source=bl&ots=8py_XUyTUH&sig=BWr9rdG9fQ6E3f-jh9dft--N3_M&hl=en&sa=X&ei=sAdPU-3QHtCgkgWghlHgAQ&ved=0CEQQ6AEwBQ#v=onepage&q=Phoebus%20cartel%20-%20Philips&f=false Or Google: *Dutch Enterprise in the 20th Century: Business Strategies in Small Open Country* by Keetie E. Sluyterman

Curacao is a major overseas tax haven we don't usually hear much about today, but it epitomizes the level of extreme hypocrisy, fraud and unethical character of the Dutch business and banking aristocracy. It is an island in the southern Caribbean Sea off the Venezuelan coast that formed part of the Netherlands Antilles, which were dissolved on 10 October 2010, to become the Dutch Caribbean. Based on the traditional fascist, colonial, British system of dictatorial rule, it is governed as a Parliamentary democracy under the Dutch monarchy within the Kingdom of the Netherlands.

In 1634, after The Netherlands achieved independence from Spain, Dutch traders and colonists commenced to occupy the island. Around this period, the Dutch West India Company founded the capital of Willemstad, on the banks of an inlet and harbour which became a centre for Dutch slave trading, shipping, tax fraud and piracy. Many Sephardic Jews settled there and were among its most influential leaders – hence the reason why the Dutch Jewish Philips family chose to move their financial base there.

On 29 January, 2013, *FINFACTS* published an article entitled, "Dutch tax haven has 20,000 letter-box companies including U2's' reporting; "Nearly one-third of all foreign profits reported by US corporations in 2003 came from just three small, low-tax countries: Bermuda, The Netherlands, and Ireland." The article continued, "Bloomberg reports that a bookkeeper's home office in Amsterdam doubles as the headquarters for a Yahoo! Inc. offshore unit." It says as a deficit-strapped Europe raises retirement ages and taxes on the working class, The Netherlands' role as a $13 trillion relay station on the global tax-avoiding network is prompting a backlash.

Bloomberg says that attracted by the Netherlands' lenient policies and extensive network of tax treaties, companies such as Yahoo, Google, Merck & Co and Dell have moved profits through the country. Using techniques with nicknames such as the 'Dutch Sandwich,' multinational companies routed €10.2 trillion in 2010 through 14,300 Dutch 'special financial units,' according to the Dutch central Bank. Such units often only exist on paper, as is allowed by law. Google, IBM and Italian oil and gas group ENI head the list of companies using letter-box companies to cut their Dutch tax bills to between 0% and 5% the *Volkskrant* daily said last week."

The article continued, "*DutchNews.nl* reported in February 2012 that Facebook had registered a Dutch limited company based on Amsterdam's Herengracht. But the office appeared to have been empty giving rise to suggestions the company had set up a letterbox company to avoid taxes…"

"'The 'Dutch Sandwich' has a more lurid meaning than the tax dodge that was used for decades by individuals and corporations to transfer profits from the European country to its Netherlands Antilles dependencies, **Curacao** or Aruba, in the Caribbean while paying a low rate of tax of about 5%."

"In recent years, Google and Facebook have used the dodge by using Bermuda and the Cayman Islands where there is no corporation tax levied… The tactics of Google and Facebook depend on 'transfer pricing,' paper transactions among corporate subsidiaries that allow for allocating income to tax havens while attributing expenses to higher tax countries… Google sells or licences the foreign rights to intellectual property developed in the US to a subsidiary in a low tax country. That means that foreign profits based on the technology get attributed to the offshore unit, not the parent… The IP (intellectual property) is located in no-tax Bermuda where the holding company for Google Ireland is located. So Google and Facebook route revenues from other countries into Ireland. They minimise the taxable profit in Ireland by Bermuda charging for the IP; the after-tax Irish profits are transferred within the European Union to a letter-box company in The Netherlands without giving rise to tax liability and a transfer from The Netherlands can be made to Bermuda or the Cayman Islands without having to pay any tax as the Dutch do not levy any taxes on outward dividends or royalties."

"The *Guardian* reported in 2011 that a report by tax campaign group Publish What You Pay Norway found that more than a third of the subsidiaries owned by major energy and mining companies – including Shell, BP and Glencore … were based in 'secrecy jurisdictions' where company accounts are not publicly available. The report singled out The Netherlands as the second favourite such home for extractive industry companies, a tag justified by the authors that the country does not put details of trusts on public record, require company accounts or beneficial ownership to be publicly available, nor maintain company ownership details in official records. The report said: 'Among the 358 Netherlands subsidiaries belonging to the world's most powerful extractive industry companies are subsidiaries whose names suggest their physical assets are held in a country which is not The Netherlands.'"
http://www.finfacts.ie/irishfinancenews/article_1025504.shtml
http://www.qwealthreport.com/interesting-new-low-tax-havens-in-dutch-caribbean/

In 2011, *The Associated Press (*17 May, 2011) reported, "Dutch Philips cited in bribes scandal in Poland." It continued, "A prosecutor said Tuesday that 23 Poles including two former employees of The Netherlands-based Philips Company are to go on trial in Poland on corruption charges… Laskowski said that the former head of the medical section and the former regional head of Philips Polska could face up to 12 years in prison if convicted of offering bribes of up euro 100,000 ($140,000) to hospital directors in southern Poland to persuade them to buy Philips equipment between 1999-2007."

http://www.businessweek.com/ap/financialnews/D9N97VUO0.htm

Bloomberg Businessweek on April 9, 2013, reported, **"Philips Pays $4.5 Million to Settle Poland Bribery Case With SEC –** Royal Philips Electronics NV (PHIA) was fined $4.5 million by the U.S. Securities and Exchange commission because of alleged bribery in Poland."
http://www.businessweek.com/printer/articles/478884?type=bloomberg

The US Security and Exchange Commission (SEC) released its final settlement order with Philips on April 9, 2013, by confirming; "Philips agreed to pay $4.5 million in the settlement, consisting of disgorgement of $3.1 million and prejudgment interest of $1.4 million. The SEC said that from 1999 to 2007, in at least 30 bids, employees of Philips' subsidiary in Poland

'made improper payments to public officials of Polish healthcare facilities to increase the likelihood that public tenders for the sale of medical equipment would be awarded to Philips.' The bribes and kickbacks were 3% to 8% of the contract amounts." "Philips Poland employees also kept some of the money for themselves. The improper payments 'were falsely characterized and accounted for in Philips' books and records as legitimate expenses … supported by false documentation created by Philips Poland employees and/or third parties.' In 2009, Polish authorities arrested 16 people for healthcare-related bribery, including three Philips employees." http://www.fcpablog.com/blog/2013/4/9/sec-releases-final-settlement-order-with-philips.html https://www.sec.gov/spotlight/fcpa/fcpa-cases.shtml

In 2012, *theGuardian* (6 December 2012), reported; "Samsung, Philips and Panasonic hit with record £1.2 billion cartel fine:" It said, "The European Commission imposed the largest cartel fine in its history, imposing a €1.47 billion (£1.2 billion) penalty on seven firms including Philips, Samsung SDI and Panasonic for fixing the price of the now outmoded cathode ray tubes used in televisions and computer monitors. For almost a decade between 1996 and 2006 the firms met in Paris, Rome, Glasgow and Asia for 'Green meetings', so called because they would often end in a round of golf. The companies fixed prices, shared markets, restricted output and allocated customers between themselves, on a worldwide basis. Chunghwa, LG Electronics, Philips and Samsung SDI participated in both the television and computer screen cartels, while Panasonic, Toshiba, MTPD (currently a Panasonic subsidiary) and Technicolor (formerly Thomson) were members of only the TV syndicate." http://www,theguardian.com/business/2012/dec/06/samsung-philips-panasonic-record-cartel-fine

In 2013, the *Thomson Reuters Foundation,* (9 April, 2013) reported (in relation to the Philips $4.5 million Poland bribery case), *"Remedial efforts help Philips escape U.S. bribery fine after bungled internal probe* – The Securities and Exchange Commission on Friday sanctioned – but did not fine – global electronics maker Koninklijke Philips Electronics N.V. for violating the books and records and internal controls provisions of the Foreign corrupt practices Act." http://www.trust.org/item/20130409145100-7od0z/?source=search

Royal Philips N.V. is the biggest lighting and LED light bulb manufacturer in the world. Would you trust all of their statements about their LED products?

CHAPTER THREE

UNIVERSITY GRADUATES AND UNION OF CONCERNED SCIENTISTS

To be able to fully appreciate why millions of leading business executives, doctors, scientists (and lawyers, too, but we will leave them for another day) around the world are more often than not compulsive liars – and are consistently now not telling the truth about the true adverse effects of LEDs – it is important to understand a little bit about the psychology of these professionals and why, to the mystification of most people, they unethically do what they do.

University Graduates: Doctors and Scientists

For a start, before any person can become a 'qualified' doctor or scientist they must become a university graduate first. If they don't go through this ritual, they cannot practice. So who are university graduates anyway?

Most people have an almost, 'blind faith' in doctors and scientists supposing that because they have 'graduated' from some university and got letters before or after their name they know more than everybody else. Of course, this is not the truth at all.

The fact is, virtually all university degrees throughout the world, including even most of those awarded from the supposedly 'Christian' universities or Bible colleges, are fundamentally Masonic, derived from pagan beliefs in ancient Babylon. The words 'graduate' and 'doctorate' are simply composites of two individual words, 'gradual' and 'indoctrinate.' Rarely will university 'graduates' be independent, free thinkers, because after years at university working for their 'doctorate' they will already have been 'gradually indoctrinated' or mind-controlled into a fixed way of thinking promoted and required by their respective university to qualify for their [Masonic] degree.

At graduation, generally it is a customary practice to dress all university students in a black gown with a Masonic square mortarboard cap with a tassel hanging from the centre of it. This cap has to be worn as a Masonic 'compass' with one corner of the cap facing forward over the forehead (temple) pointing towards a Masonic 'square' hung about the neck and shoulders, to represent the Masonic Compass and Square emblem (witchcraft hexagram) with the tassel hanging towards the left shoulder, thus consecrating the graduate to the worship of the ancient sun-god Baal. The Masonic mortarboard cap is directly derived from a cap worn by the Roman Catholic clergy, which was originally preserved by the Pharisees and Jews in Babylon where the pagan priests of Marduk/Saturn first used it as an emblem of erudition.

The tassel on the cap comes from the paganism of the Pharisees, preserved in Judaism's Babylonian Talmud and is a perversion of instructions in the Bible given by Moses to make 'fringes' for the garments of the Levitical Jewish priesthood (Numbers 15:38-39). In Babylon, apostate Jewish priests perverted these instructions and made the fringe into the 600 tassels, 8 strings and 5 notes, which were worn by the Pharisees to supposedly represent

the 613 laws of Moses – when at the same time these tassels were consecrated to the left-hand worship of the Babylonian sun-god, called by various names – Baal/Bel/ Marduk.

This pagan practice, which was observed by the Jews at the time of Christ, after the desolation of Jerusalem by the Roman general Titus in AD 70, was merged into the ritual of the Gnostic catechetical schools in Alexandria Egypt, later into the Roman Catholic Church, and finally into the Protestant Church and Freemasonry officially founded in London in 1717.

Thus today the Pharisees' tassel has now grown to become the chief emblem of erudition in virtually all the major university capping ceremonies of the world – and the reason why all university graduates use letters before or after their names – showing that they have been deceptively 'indoctrinated' to become 'alumni,' of the Masonic Lodge, whose deity is Lucifer, the ancient pagan light-bringer god.

The reason why university degrees are presented to the recipient at the university capping ceremony by tapping the graduate with the rolled-up degree on the LEFT SHOULDER (or sometimes more rarely both shoulders) is to consecrate both the degree of learning and graduate to the Masonic worship of the sun, and his left-hand man and light-bringer – Lucifer. Before the ceremony begins, students are required to hang the tassel on their square mortarboard cap over their RIGHT SHOULDER (assuming the candidate is consecrated to the God of the Bible), but after they have received their degree and have officially graduated and become "illuminated" or "born again", the tassel is moved to hang over their LEFT SHOULDER (consecrated to Lucifer).

The reason for this is that, as a Levitical priest had to enter Solomon's temple in Jerusalem to worship God, before it was desolated by the Babylonians, he would have had to face north, because the entrance door was on the south. As the sun rises in Jerusalem on the east side and sets on the west side, to turn away [apostatize] from worshipping the God of the Bible (who's dwells in the **north** (Isaiah 66:1), and whose presence was represented in the holy of holies located inside the **north** part of the temple), to apostatize, and turn away from the God, and begin to worship and follow the sun-god Baal moving across the sky from the east to the west, one must turn to the LEFT.

Hence, in the biography of LUCIFER in Isaiah chapter 14, Lucifer (Satan) in his masquerade as the light-bringer, lifts himself up in pride and tries to imitate Christ [the true Light-bringer to mankind of which the holy of holies in the NORTH part of the temple of the Lord are representative] in rebellion against God.

- *"For thou hast said in thine heart, I will ascend into heaven, I will exalt my throne above the stars of God: I will sit upon the mount of the congregation,* ***in the sides of the north:*** *I will ascend above the heights of the clouds; I will be like the most High. Yet thou shalt be brought down to hell, to the sides of the pit."* (Isaiah 14:13-15).

All of the pagan religions in the world worship this sun-god or god of light in his various incarnations and this is the reason why the LEFT is so highly revered and venerated among them.

The black robes traditionally worn by Babylonian priests were later adopted by the Pharisees, Roman Catholic priests, Orthodox Jews, Freemasons, the legal profession, judges, Fascists and university graduates – all dedicated to the worship of the pagan sun-god. All war medals are traditionally worn on the LEFT breast and consistently use emblems of either stars or crosses, ancient emblems of the Egyptian, Babylonian, Greek or Roman sun-gods. Most war memorials are obelisks or similar such emblems of the ancient sun-god. In

Greece, the officiating priest leading worshippers would always walk in an *anticlockwise* direction three times around the altar, consecrating the sacrifice to the sun-god. Brahmin priests during their rituals first adore the sun, and then they walk in a westward direction following their LEFT HAND by way of the south saying, "I follow the sun."

In Freemasonry, when a new initiate enters the Lodge, he goes through a witchcraft ritual called *Circumambulation*. This long word comes from Latin and means, 'walking all around.' During the ritual, the candidate ceremoniously walks around the lodge in the direction assumed to be taken by the sun, (in a left-hand, anti-clockwise direction) when he is presented to his Masonic brethren for his first degree. (The meaning of this is that he is to be symbolically "born again" and "illuminated" to worship Lucifer). (Ref. *Freemasons' Guide and Compendium* by Bernard E. Jones p.274-275). See also: http://www.sacred-texts.com/mas/syma/syma15.htm

In Islam, all Muslim pilgrims must circle the Black Stone at Mecca in the EASTERN CORNER (to worship the rising sun) of the Kaaba in the Circumambulation ritual as part of the Tawaf ritual of the Hajj. During this *Circumambulation* ceremony they must walk seven times around the Kaaba in a counter-clockwise direction, kissing the Black Stone each time emulating the footsteps of Muhammad in worshipping Allah, the son-god. The name *Allah*, by the way, is not originally Arabic but is taken directly from Hebrew *Elah* meaning 'oak' or 'oak tree' one of the ancient symbols of the sun-god Baal. The old Celtic name *Druid* also means 'oak' and in ancient times in Britain Druid priests would annually worship the sun-god by carrying out the *Circumambulation* ritual dancing in an anti-clockwise direction around the Maypole. http://en.wikipedia.org/wiki/Black_Stone

Hence, in Israel, the Valley of Hinnom, (Greek '*Gehenna*' or Hebrew '*Gehinnam*' or KJV Bible ***'Hell'***) to a person facing north standing in the old city of Jerusalem, was located on the LEFT of the city. In the Bible, this ancient site was where apostate Israelites worshipped the sun-gods, Baal and Moloch, by sacrificing their children by fire to the pagan god of light. In Jewish, Christian and Islamic scripture, Gehenna is considered to be the destination of the wicked.

So next time you see, hear or read material by someone with a Masonic 'university degree' or "letters" before or after their name, do be cognizant of the fact he or she has been carefully indoctrinated or mind-controlled to follow a particular point of view – and may, whether intentionally or not – be a liar and worshipper of the pagan sun-god.

This does not mean that all university-trained people, doctors and scientists etc. are a bunch of compulsive liars – far from it. In spite of having gone through university training, some amazingly still do remain very capable, honest, dedicated, outstanding people. But it does mean that a lot are severely compromised, or at least are deeply affected by the university mind-control programming and remain so for the rest of their lives.

University students are not "educated," or encouraged to be "independent thinkers." The fact is they are heavily "indoctrinated" to follow the express views of their professors. If the independent views or opinions of a student conflict or differ too greatly with the university hierarchy, no graduation or degrees will ever be forthcoming. It's as simple as that.

If graduates ever end up working for government organisations, agencies or corporations (as most of them usually do) then the temptation to not tell the truth is a thousand times greater.

It is so important to comprehend these basic facts, because this controversial book about LEDs (together with the research from a relatively small handful of extremely courageous, honest doctors and scientists) is independently opposing the accepted view of millions of these professional doctors and scientists – who in turn are supported by an enormous force of corporate power, amounting to literally trillions of dollars, far beyond most people's wildest imaginations.

Union of Concerned Scientists (UCS)

In 1969, a non-profit organisation called the Union of Concerned Scientists was founded by faculty and students of Massachusetts Institute of Technology in Cambridge, Massachusetts, U.S.A. Essentially this was largely to try and stop the censorship, manipulation, distortion and suppression of scientists and scientific information by corporate and federal interests that had a stake in the outcome. The organization has offices in Cambridge Massachusetts, Washington D.C., Berkeley California and Chicago Illinois.

Today it is the leading organisation in its field, has a membership of well over 400,000 concerned scientists, professional men and women (these figures are according to their own website: http://www.ucsusa.org/about/) from all walks of life, mainly in the US, who have serious concerns about scientific and environmental issues. On the organisation's official website Home page, http://www.ucsusa.org/scientific_integrity/abuses_of_science/how-corporations-corrupt-science.html they advertised a report, published in February 2012, *Heads They Win, Tails We Lose: How Corporations Corrupt Science at the Public's Expense,* which vividly shows how corporations influence the use of science in federal decision making to serve their own interests. This includes:

1) **Corrupting the Science:** How corporations suppress research, intimidate scientists, manipulate study designs, ghost-write scientific articles and selectively publish results that suit their interests.

2) Shaping Public Perception: Private interests downplay evidence, exaggerate uncertainty, vilify scientists, hide behind front groups and feed the media slanted news stories.

3) Restricting Agency Effectiveness: Companies attack the science behind agency policy, hinder the regulatory process, corrupt advisory panels, exploit the "revolving door" between corporate and government employment, sensor scientists and withhold information from the public.

4) Influencing Congress: By spending billions of dollars on lobbying and campaign contributions, corporate interests gain undue access to members of Congress, encouraging them to challenge scientific consensus, delay action on critical problems and shape the use of science in policy making.

5) Exploiting Judicial Pathways: Corporate interests have expanded their influence on the judicial system, used the courts to undermine science and exploited judicial processes to bully and silence scientists.

While this author does not agree with all of this report, *Heads they Win, Tails we Lose* (which may be downloaded from their website), there still are some parts of it which are just stunning. Here are a few extracts:

"**Methods of Abuse:** Corporations attempt to exert influence at every step of the scientific and policy-making processes, often to shape decisions in their favour or avoid regulation and monitoring of their products and by-products at the public's expense. In so doing, they

often attempt to fundamentally alter the decision-making process and exploit executive branch agencies, Congress, and the courts."

"**Corrupting the Science:** Corporations that stand to lose from the results of independent scientific inquiry have gone to great lengths to manipulate and control science and scientists by:

- *Terminating and suppressing research.* Companies have controlled the dissemination of scientific information by ending or withholding results of research that they sponsor that would threaten their bottom line.
- *Intimidating or coercing scientists:* Corporations bury scientific information by harassing scientists and their institutions into silence. Scientists have been threatened with litigation and the loss of their jobs, have had their research defunded, have been refused promotion or tenure, and have been transferred to non-research positions, leading to self-censorship and changes in research direction.
- *Manipulating study designs and research protocols:* Corporations have employed flawed methodologies in testing and research – such as by changing the questions scientists are asking – that are biased towards predetermined results.
- *Ghost-writing scientific articles:* Corporations corrupt the integrity of scientific journals by planting ghost-written articles about their products. Rather than submitting articles directly, companies recruit scientists or contract with research organizations to publish articles that obscure the sponsor's involvement.
- *Publication bias:* Corporations selectively publish positive results while underreporting negative results. While not directly corrupting science itself, these publishing and reporting biases skew the body of evidence.
- *Shaping Public Perception:* Armed with public relations teams, private interests have launched campaigns that influence public opinion and undermine understanding of scientific consensus:
- *Downplaying evidence and playing up false uncertainty:* As scientific understanding of the health effects of products and substances such as tobacco and particulate emissions emerges, companies fight regulation by attacking the science, downplaying scientific consensus, exaggerating scientific uncertainty and spreading doubt.
- *Corrupting scientific advisory panels:* Government agencies rely on independent scientific advisory panels to provide objective advice. But panel members often have undisclosed financial conflicts of interest: ties to companies that stand to win or lose based on the findings of these advisory committees.
- *Spinning the revolving door:* Officials shuttle between high-level government positions and regulated industries or corporations. This revolving door can lead to regulatory capture: federal agencies charged with protecting the public can end up as shields or advocates for the regulated industries.
- *Censoring scientists and their research:* Federal officials with industry ties have detected selected evidence from scientific documents, knowingly adopted flawed methodologies, put direct pressure on scientists and their supervisors to alter findings, and censored scientists to prevent them from speaking publicly or with the media.
- *Protecting Scientist Whistle-blowers:* Of the nearly 5,100 federal scientists working across ten federal agencies who responded to the Union of Concerned Scientist's *questionnaires* in recent years, more than 1,900 federal scientists said they feared retaliation for discussing their agencies' mission-driven work." etc.

Much of the information put out by the Union of Concerned Scientists (UCS) is good. However, it's a pity the organisation doesn't practice what it preaches. As so often happens with organisations that frequently start off with good intentions and ideals, through the process of time, they get infiltrated and subtly taken over by vested financial interests. Unfortunately, this has happened to the Union of Concerned Scientists as well – big-time!

While the organisation outwardly claims it supports whistle-blowers, independence and transparency of scientific research – this absolutely does not extend to "climate deniers of global warming or sustainable development." The reason for this is that the many foundations that fund UCS are owned by multinationals – the very corporate interests it so vehemently claims to oppose.

Today the Union of Concerned Scientists is not a proper 'science' organisation at all. It is simply a massive, big business, US political lobby group. While it claims to represent a membership of over 400,000 citizens and scientists, it is simply a deceptive 'front group' of international big business. It works closely with multiple UN agencies, global environmental groups and the World Business Council for Sustainable Development (WBCSD) which in turn is funded by the world's biggest multinational corporations including General Electric, Royal Philips N.V. and Siemens.

http://www.wbcsd.org/Pages/EDocument/EDocumentDetails.aspx?ID=11944&NoSearchContextKey=true

Kevin Knobloch, the recent President of UCS from December 2003 to 2013, before joining the US Department of Energy in June 2013, was anything but a 'concerned scientist.' In fact, while at the UCS he led UCS delegations to the United Nations international climate negotiations in Montreal in 2005, Bali in 2007, Pozan in 2008, and Copenhagen in 2009. He served as co-chair of the Green Group, a coalition of the CEOs of 32 environmental organisations and served as co-chair of the Green Group Climate and Energy Committee for seven years.

For eight years, until relatively recently, he was on the board of directors of the Coalition for Environmentally Responsible Economies (CERES) an acronym, deliberately named after the Roman mother-earth goddess Ceres, (whose ritual feast, called the *Cerialia,* held on April 19th every year, included a burnt offering, called the HOLOCAUST). This Roman mother-earth goddess, is the consort of the pagan sun-god, earlier in this chapter referred to, that all university graduates are consecrated to during their graduation ceremonies. So it shouldn't come as too much of a surprise to observe why virtually all university-indoctrinated scientists and doctors worship her, and why she is now the *official patron* of the United Nations Food and Agriculture Organisation (FAO) based in Rome. http://www.un.org/News/Press/docs/2003/sag208.doc.htm

The New Zealand Prime Minister, Helen Clark, was awarded the United Nations FAO Ceres Medal on 19 December 2003, for her work in promoting food security, international partnership and sustainable development. Clark is an agnostic and Marxist from way back during her time at university where she majored in politics graduating with an MA (Honours) in 1974. Her husband, Peter Davis PhD, is a Professor of Sociology at the University of Auckland, in New Zealand. He gained his Master's degree in Sociology and Statistics at the London School of Economics (LSE) and is a long-time member of the Fabian Society. The LSE, founded by the Fabian Society, is the foremost training school of socialist leaders throughout the world. Members of the socialist Fabian Society, founded in 1884, were responsible for creating modern Fascism, Marxism and Communism as we know it today.

The current President of the EU Commission and most powerful office holder is José Manuel Barroso. He regularly attends meetings at the LSE and like Clark, in his college days was also a member of Communist groups. At the present time, Clark is the Administrator of the United Nations Development Program (UNDP), the third highest UN position. On January 27, 2014, *theGuardian* newspaper in London ran an article, "Will Helen Clark be the first woman to run the UN?"

The Coalition for Environmentally Responsible Economies (CERES) organization, founded in 1989, based in Boston, Massachusetts, and linked to the Union of Concerned Scientists (UCS), while claiming to protect the environment, is also another devious front group funded by big business, multinational companies such as; Bank of America, Coca Cola, Consolidated Edison Inc., Dell Inc., Ford, GM, JPMorgan Chase & Co., Morgan Stanley etc. http://en.wikipedia.org/wiki/Ceres_(organization) The group has absolutely nothing to do with ensuring honest science is promoted at all.

While the Union of Concerned Scientists criticises 'revolving door' policies in other organisations, it does the same thing itself. Lance Pierce, the current Director and Chief Operating Officer of CERES, overseeing programs, operations and strategic planning was previously Director of the Climate & Energy Program, UCS's largest program of the Union of Concerned Scientists. http://ratesustainability.org/about/steering-committee/

Because the Union of Concerned Scientists is largely funded by foundations established by rich corporate leaders of multinational corporations, that include the big global light bulb manufacturers like GE, Royal Phillips N.V. and Siemens, it goes without saying they unquestionably support the implementation of LED light bulbs to the global market.
http://www.livescience.com/42840-standards-to-boost-american-energy-efficiency.html
http://www.ucsusa.org/publications/catalyst/fa12-how-it-works.html
http://www.ucsusa.org/publications/got-science/2014/got-science-january-2014.html

The current Chairman of the Union of Concerned Scientists, James J. McCarthy, is also a multinational, big business, subservient puppet. He previously was the President of the American Association for the Advancement of Science in 2008, and has regularly participated in several studies on climate change, serving as Co-Chair of the Intergovernmental Panel on Climate Change (IPCC) Working Group II in 2001. http://www.ipcc.ch/ipcc.ch/ipccreports/tar/wg2/index.php?idp=2

Established in 1988 by two UN agencies, the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP), the IPCC is a scientific intergovernmental group under the UN, supported by thousands and thousands of scientists from 120 countries – whose [supposed] ultimate objective is to stabilize greenhouse gas concentrations (like 'cow farts'; can you imagine the imbecility?) in the atmosphere at a level that would prevent anthropogenic (human-induced) climate change to prevent global warming and implement 'sustainable development.'

So what do these highly-trained, university-educated, scientific "experts" actually mean by using the term, "Sustainable Development?" Are they really telling us the truth in saying they want to help humanity by protecting the environment? Far from it!

CHAPTER FOUR

SUSTAINABLE DEVELOPMENT: UNFPA, NAZI DOCTORS, & SCIENTISTS

The aim of this chapter as a follow on from the last one is to prove that most leading doctors, scientists and environmentalists are inspired by "spiritual forces" other than those that motivate men and women to tell the truth. Without understanding the phenomenon of 'Sustainable Development,' it is extremely difficult to explain why such a great body of professionals, on a global basis, in unison, virtually all are now neglecting to warn the world public about the inherent dangers of LEDs.

Diocletian, Plato, Porphyry, Environmentalism and persecution of Christians and non-conformists

There has always been a close relationship between paganism, mother earth worship, veganism, ecology, and environmentalism with socialism, fascism and communism. Hence, in the modern world usually "green" political parties will inevitably align themselves with left-wing socialist parties because greenies are more often than not even more communist than the communists themselves.

Historically, the inspiration behind fascist and socialist pagan leaders to persecute Jews, genuine Christians, and all non-conformist individuals as "enemies of the state" has always come from environmentalist philosophy. It is fair to say environmentalism is the arch-enemy of both Christianity and the Bible.

The Roman emperor Diocletian (reign: 284-305 AD) is generally regarded as the greatest persecutor of Christians the world has ever known. The reasons for Diocletian's persecutions are often considered to be "unclear" by many secular historians. This is because after he came to power in 284 AD, for nearly 20-years he conscientiously upheld edicts of toleration made by a previous emperor.

His wife and daughter were Christians, as were many of his court officers and household staff. However, a minority of church historians (correctly, in this author's opinion) were led to believe his actions were all inspired by the powerful influence of his deputy, Galerius, and even more by the famous Neo-Platonist "green" philosopher – Porphyry.

Porphyry (233-309 AD) was a gifted Syrian scholar, Neo-Platonist philosopher and writer. In Rome he was widely known and respected as a leading bitter opponent of Christianity, and a defender of Greece/Roman paganism. It is not just a coincidence that his book, *Philosophy from Oracles* was written and published *just before* the persecutions were initiated by Diocletian and Galerius. In fact, it set the basis for them. Of his work, *Adversus Christianos* 'Against the Christians' in fifteen books, only fragments remain. In these writings he is famously quoted as saying, "The gods have proclaimed Christ to have been most pious, but the Christians are a confused and vicious sect."

Porphyry was, like Pythagoras, a "green" radical advocate of vegetarianism on spiritual and ethical grounds. He and Pythagoras are the most radical vegetarians of classical antiquity.

Porphyry wrote, *De Abstinentia* 'On Abstinence' and *De Non Necandis ad Epulandum Animantibus* 'On the Impropriety of Killing Living Beings for Food,' advocating the philosophy against the consumption of animal meat, and he is widely cited with approval in vegetarian literature up to the present day.

Indeed, in New Zealand, the main vegan group in the country based in Christchurch calls itself *'Porphyry's People*.' On their website, www.vegan.org.nz/ they describe themselves as "promoting veganism to further ethical, and ecological goals," and include a quote from British Fabian Socialist, George Bernard Shaw. Not only was Shaw a vegetarian on spiritual grounds, he was a founding member of the socialist Fabian Society and the one who created the society's coat of arms – a literal wolf in sheep's clothing.

The pagan philosophies of Plato, Porphyry, Environmentalism (which includes ecology, global warming, climate change, CO2 emissions etc.), mother earth worship, socialism, fascism and communism are all inseparable.

In Hitler's Nazi Germany, the pagan sun-god was personified as the "Green Man," St. George, who was considered the chief Fascist deity – that freed all the people from Communism, Judaism and the Versailles Treaty that suffocated the German economy and organized will of the German nation.

The 'Freedom Badge' of the German NSDAP issued in 1935 actually depicted St George slaying the dragon on it.

Traditionally, in the Roman Catholic and Anglican Churches, the Feast of St George is held on April 23rd every year. In ancient Rome this particular day was the greatest feast day of the year dedicated to Jupiter called the *Vinalia*. The Vatican simply "Christianized" it and changed the name of it to St George's Feast Day, after a "Saint" who in reality is the personified sun-god, Jupiter, who in Greece was called Zeus.

The Green Fascist Ecology and 'Green Wing' of the Nazi Party were headed by a fanatical ecologist called Alwin Serfert who bore the official title *Reich Advocate for the Landscape.* Within the Nazi Party his nickname was "Mr. Mother Earth."

Environmentalism, conservationism, vegetarianism, animal rights, eugenics and nature worship were all inseparable beliefs in Nazi thought. Their concept of "racial hygiene" was seen as "cleansing" the human genetic stock, in much the same way as ecology "cleanses" the environment and cares for the earth mother.

Extensions of Nazi eco-fascism included goals to reduce the world's population, particularly of "useless eaters" deemed to be Jews, gypsies, the infirm and other perceived racially inferior groups.

The Italian Fascist Dictator Benito Mussolini wrote in 1927:

"The corporate State considers that private enterprise in the sphere of production is the most effective and useful instrument in the interest of the nation. In view of the fact that private organization of production is a function of national concern, the organizer of the enterprise is responsible to the State for the direction given to production.

State intervention in economic production arises only when private initiative is lacking or insufficient, or when the political interests of the State are involved. This intervention may take the form of control, assistance or direct management."
(Benito Mussolini, 1935. *The Doctrine of Fascism, Firenze: Vallecchi Editore, pages 135-136).*

Simplified, Fascism is simply the merger of corporatism with socialism.

Hence, global environmentalism, corporatism and fascism now work hand in hand in providing justification for transforming the whole world to LED lighting based solely on the premise of the need to save "mother earth" – from the construction of new power stations, more CO2 emissions, global warming, climate change, intensive farming, depletion of natural resources, over-population etc. that they believe are increasingly "suffocating" and "raping" her. As the result, any new, radical changes that are to be made in the future to the "development" of the whole earth must be "sustainable." Hence, the widely-used deceptive term, Sustainable Development.

Sustainable Development and human population reduction

Most ordinary people who use the term "sustainable development" naturally want to protect the environment the best they can and help preserve the world's resources for their fellow man and future generations there is no doubt.

But the rich and powerful pagan elite, who control the world's biggest multinational companies, banks and the UN – accompanied by most of the world's foremost environmentalists and scientists have an entirely different view of the term. To them, although they will rarely admit it, 'Sustainable Development' is unequivocally a RELIGION.

Joan Veon (17 May, 1949 –18 October, 2010): Joan Veon, a highly perceptive American author (who was years ahead of her time in her writing) and foremost critic of the United Nations Organization and their term "Sustainable Development" succinctly wrote on August 13, 2004: http://www.newswithviews.com/Veon/joan19.htm

"It should be noted that hundreds, if not thousands of environmental NGOs support and are helping to implement Agenda 21 worldwide.

"The United Nations has given them vast responsibilities to assist in the implementation of sustainable development. Furthermore, governments are recognising their manpower as a free source of power to carry the message throughout the world.

"Two very powerful NGOs that were part of the birthing of sustainable development are the International Union for Conservation of Nature and Natural Resources (IUCN) and the World Wildlife Fund (WWF). In the fall of 1983, the 38th Session of the United Nations General Assembly passed Resolution 38/161, which called upon the secretary-general to appoint a commission 'to propose long-term environmental strategies for achieving sustainable development to the year 2000 and beyond.'

"The individuals chosen for that commission included Gro Harlem Brundtland, former prime minister of Norway and vice-president of the Socialist International who just retired as Director-General of the World Health Organization.

"It was William Ruckleshaus from the U.S. who also served on this life-changing commission. The rest of the delegates were from other socialist, Marxist, or communist countries. While I could provide you with their definition of sustainable development which my research shows is based on the 1977 USSR constitution, let me paraphrase:

"The world has too many people, and if we do not reduce the number of people on planet Earth, they will use up all of the Earth's resources so that future generations will be left without any resources. The United Nations is the best global body to monitor, manage and preserve the resources of the planet."

United Nations Fund for Population Activities (UNFPA)

As a result of early UN policies based upon Sir Julian Huxley's eugenicist plans to cull off a large proportion of the world's population long before 'Sustainable Development' was ever promoted, the United Nations Fund for Population Activities (UNFPA) was established in 1969. The name of the fund was changed in 1987 to United Nations Population Fund (UNFPA).

Today one of the biggest funders of the UNFPA is Microsoft founder and one of the world's wealthiest individuals, Bill Gates. He funds it through his Bill & Melinda Gates Foundation. While he projects an image of one who is a benign philanthropist via his tax exempt Bill & Melinda Gates Foundation to tackle diseases, solve food shortages and boost family planning in developing countries – the truth is he is a dedicated eugenicist having long held the opinion that vaccines are the best method to reduce the world population. http://www.unfpa.org/public/

On July 11, 2012, Bill Gates joined eugenics organizations such as Planned Parenthood and the UNFPA at a summit in the UK to celebrate the 100th Anniversary of the First International Eugenics Congress which took place in London July 24-29, 1912.

The 1912 Congress was dedicated to the eminent scientist, Sir Francis Galton, a pioneer in eugenics who had died the year earlier and who first coined the term 'eugenics.' Because Galton was eugenicist Charles Darwin's half-cousin, Major Leonard Darwin the son of Charles Darwin presided at the five day meeting of about 400 delegates.

Sir Francis Galton was a Freemason and a member of the *Scientific Lodge*, part of the United Grand Lodge of England. After 1933, the Nazi government implemented its eugenics plans based on the early work and writings of Anglo/American eugenicists who attended this congress.

Nazi Germany's *Action T4* euthanasia plan

The T4 plan was the fulfilment of a barbaric eugenicist conspiracy through which Nazi **doctors** by the thousands deceptively murdered and euthanized thousands of people. If anything, it was a special warning to future generations never ever to hold a doctor's integrity above that of a common thief or murderer. Physicians have both a "good side" and a "dark side," separated by a very thin line between the two.

Extermination centres run by the doctors were established at six existing psychiatric hospitals and they played a crucial role in developments leading to the Final Solution and Holocaust. A national register of all institutionalised people with major health problems, mental illnesses or physical disabilities was created, (similar to computer files held by doctors of patients today that are shared with government agencies under the UN).

A huge proportion of German physicians participated in the T4 program, and over 38,000 German doctors were active members of the Nazi Party.

Of course, conveniently, after the war, the West German Medical Association blamed these atrocities not on themselves but on a small renegade, criminal element among their members. In December 1946, an American military tribunal (commonly today referred to as

the Doctor's Trial) prosecuted 23 of the ring leaders and in August 1947, 16 of the defendants were pronounced guilty, with seven sentenced to death and executed on 2 June 1948.

The name T4 given to the program by the Nazi doctors was an abbreviation of *Tiergartenstraβe 4*, the address of a villa in the Berlin borough of Tiergarten which was the headquarters of *the 'Charitable Foundation for Curative and Institutional Care'* – through which they cunningly coordinated their deceptive program of death. Most people, at least at the beginning, were deceived in that the Nazis called it a '*Charitable Foundation*!' The primary groups targeted were criminals, dissidents, children with disabilities, the feeble-minded, homosexuals, idle, lazy, mentally retarded, invalids etc.

The main inspiration of the T4 program was taken from British scientists Charles Darwin, Sir Francis Galton, Sir Julian Huxley, and eugenicists such as Harry H. Laughlin and Ernst Rüdin who wrote the 1933 *Law for the Prevention of Hereditarily Diseased Offspring*. More than 400,000 people were sterilized, while more than 275,000 were secretly euthanized.

Huxley, Eugenics, WWF and UNESCO

Today the same system is being gradually set up once again through the United Nations. It is no coincidence that Sir Julian Huxley (1887-1975) was the first director of the United Nations Educational, Scientific and Cultural Organization (UNESCO) founded on 4 November 1946, now based in Paris. So we may ask. Is UNESCO a genuine 'scientific' organization or is it a more correctly 'religious' one?

Huxley was a prominent member of the British Eugenics Society, was Vice-President (1937-1944) and President (1959-1962). Huxley (who himself came from a privileged, distinguished family) believed that the lower classes of society were genetically inferior to those at the top. It's strange how those at the top always see themselves very much better and worthy of surviving as a species than everyone else, without genuine compassion for those less fortunate isn't it? He exclaimed in his book, *The Uniqueness of Man 1941:*

"The lowest strata are producing too fast. Therefore… they must not have too easy access to relief or hospital treatment lest the removal of the last check on natural selection should make it too easy for children to be produced or to survive; long unemployment should be ground for sterilization."

Sir Julian Huxley also jointly co-founded the World Wildlife Fund (WWF) in Switzerland with Max Nicholson, Peter Scott, Guy Mountfort, Godfrey A. Rockefeller and Prince Bernhard of the Netherlands in 1961. In 1986, the organization changed its name to World Wide Fund for Nature (WWF). In 1996, the WWF was given consultative status with UNESCO. Currently it is headquartered in Gland, Vaud, Switzerland and the President Emeritus is none other than HRH The Duke of Edinburgh.

The United Nations Population Fund (UNFPA)

Through UNESCO, the UN World Health Organization (WHO), and other key UN agencies, a eugenics plan developed long ago is gradually getting all of the populations of over 195 member countries placed on a *global computer data base* run by government health organizations and all medical doctors. This ostensibly is to ensure that: "every pregnancy is wanted, every birth is safe, every young person is free of HIV and sexually transmitted diseases, every girl and woman is treated with dignity and respect, and everyone, both young and old, receives proper primary health care." But it is all a gigantic deception, a

massive hoax, ultimately, designed to prepare the whole world for a Nazi-like state program of selective culling off of all the considered 'useless eaters.'

The United Nations Population Fund (UNFPA) and the World Wide Fund for Nature (WWF) have joined forces with other environmental organizations, foundations and companies to fund a special interdisciplinary agency, founded in 1974, based in Washington D.C., called the *Worldwatch Institute* – to accelerate the transition to fully implement Sustainable Development – which includes a devious plan to cull off about two-thirds of the world's current population.

Worldwatch Institute

The *Worldwatch Institute* actually included a frontline article supporting the culling off of about two-thirds of the world's population on its website openly confirming this on 19 May, 2014. You can read this shocking article yourself on their website: http://www.worldwatch.org/node/563

This is not just wild speculation or a conspiracy theory by some uneducated nutter – It is the real thing – from their very own website! This is an extract:

"Global Population Reduction: confronting the Inevitable: *Looking past the near-term that have plagued population policy at the political level, it is increasingly apparent that the long-term sustainability of civilization will require not just a levelling-off of human numbers as projected over the coming half century, but a colossal reduction in both population and consumption.*

It has become increasingly apparent over the past half-century that there is a growing tension between two seeming irreconcilable trends. On the one hand, moderate to conservative demographic projections indicate that global human numbers will almost certainly reach 9 billion, perhaps more, by mid-21st century. On the other, prudent and increasingly reliable scientific estimates suggest that the Earth's long-term sustainable human carrying capacity, at what might be defined as an "adequate" to "moderately comfortable" develop-world standard of living may not be much greater than 2 to 3 billion. It may be considerably less, particularly if the normative lifestyle (level of consumption) aspired to is anywhere close to that of the United States.

As a consequence of this modern-day "Malthusian dilemma," it is past time to think boldly about the midrange future and to consider alternatives that go beyond merely slowing or stopping the growth of global population. The human species must develop and quickly implement a well-conceived, clearly articulated, flexible, equitable, and internationally coordinated program focused on bringing about a very significant reduction in human numbers over the next two or more centuries. This effort will likely require a global population shrinkage of at least two-thirds to three-fourths, from a probable mid-to-late 21st century peak in the 9 to 10 billion range to a future (23rd century and beyond) "population optimum" of not more than 2 to 3 billion..."

Is it unfair to suggest, if the scientific and medical community en masse can plan to do this with eugenics, then they certainly can as a unitary body deliberately tell fairy-tales about the serious long-term adverse health effects of modern LED light bulbs?

CHAPTER FIVE

SERVANTS OF THE SUN-GOD: SCIENTISTS, DOCTORS, & ENVIRONMENTALISTS

Egyptian sun-god Ra:

The ancient Egyptians believed the Earth was FLAT. In a sense, they were the first 'flat-earth society.'

The sun, they believed, was a god called Ra who visited the underworld, a watery realm of the dead, where he battled with the serpent of chaos and victoriously returned to the day each morning. During the course of the day, they believed the sun-god Ra rode across the sky from the east to the west in a *day boat* (often called the *Boat of Osiris*) and changed to a *night boat* for the return trip through the underworld. (Interestingly, today the symbol of this *Boat of Osiris* is used for the pagan logo of the World Council of Churches).

They also believed that the cosmos consisted of a dome of heaven supported by the god of Air. The sun was pushed above the horizon by a hawk (Horus) and then pushed across the sky by a scarab beetle the same way it rolls its dung. Later the Egyptians believed their sun-god carried the sun in his ***Golden Chariot***, a chore also performed by the Greek and Roman sun-god Apollo.

Greek sun-gods Zeus and Apollo

In Egypt, the father (sun-god Osiris) and his son (rising sun-god Horus) both ruled. This close father-son relationship carried on into the pagan religions of Babylon, Greece and Rome. In Greece, the sun-god Zeus was the father of the gods. 'Zeus' in Greek literally means 'father who helps.' His favourite son was therefore the god of Light – Apollo.

Because many ancient Greek physicians were pressured by the state to carry out abortions, euthanize people, carry out many dishonest practices where they often harmed their patients in the exercise of their profession, the most well-known physician in Greece, Hippocrates (460-370 BC), (today often called the father of medicine), formulated an oath dedicated to upholding firm ethical standards for doctors. Written in Ionic Greek (late 5th century BC), this document is called the *Hippocratic Oath*. For well over 2,000 years physicians continued to take this oath up to recent times.

The first four words of this pagan oath read, "I swear by Apollo." So why do doctors connect themselves to Apollo when Christians in the early church identified him with the Devil? Well, Apollo was first introduced to Rome from Greece as a healing god in the fifth century BC as a result of a desperate attempt to cure a serious epidemic, which apparently he did. As the result, this inspired the dedication of the shrine *provaletudine populi* in honour of the god who bore the official name *Apollo Medicus* (Livy 4.25.3; 40.51.6). The temple to him was dedicated in 433 BC and consecrated in 431 BC. As time passed, however, he gradually took on the Greek darker side of his split personality as Apollyon, "the destroyer" and "murderer" in his full Greek personification with his sister the goddess Artemis killing the Niobids. Apollo, therefore, became the pagan equivalent of Christ the "great physician" mentioned in Matthew 9:12 and Mark 2:17.

For nearly 2,500 years virtually all physicians and medical doctors around the world at graduation have taken this pagan oath to Apollo (and his son Asclepius) as well. In more recent times, some doctors have made a *declaration*, more not because they don't worship Apollo, but because they know they cannot even fulfil his pagan oath anymore, which clearly forbids them carrying out abortions, never doing any harm to anyone, while they must promise to keep all patients records secret, which now they don't even do that.

Today, because of state intervention in the affairs of the medical profession and the unethical standards of doctors in going along with state control, only a very small percentage of doctors take the original Hippocratic Oath. According to the *British Medical Journal,* some 98% of American and nearly 50% of British medical students still swear some kind of oath either on entry to medical school or at graduation, but these declarations are meaningless.

One of the sons of Apollo, who was transformed into the serpent-dragon was Asclepius (Latin: Aesculapius) who carried on his father's power over the medical profession. As the Greek god of medicine, Asclepius carried the *Serpent-entwined Staff,* now the emblem of the UN World Health Organization (WHO) and the global medical profession. Do you know any doctor now who has not given himself or herself over to the state controlled by WHO?

As opposed to Asclepius's *Serpent-entwined Staff* of the medical profession, most commercial medical and pharmaceutical organizations use the *Caduceus* as their emblem. It is a short herald's staff entwined by two serpents modelled on the *Wand of Hermes* or *Wand of Mercury*, the Roman god of liars and thieves. Have they, too, given themselves over to the worship of these Roman gods as well?

Asclepius had six daughters. One of them was called Hygeia, the Greek goddess of Health, from which the modern word 'health' is derived. At times she helped her grandfather Apollo spread plague on his enemies. In 1968 a stamp was issued in Greece to commemorate the 20th anniversary (1948-1968) of the UN World Health Organization (WHO). What did it have on it? It had Asclepius's *Serpent-entwined Staff* and an image of *Athena Hygieia on it*.

Christian medical students often have been reluctant to take oaths to pagan deities like this, whether to professional organizations, the military, a flag, a king, emperor, president, prime minister, country, law court or to the United Nations Organization, as it is forbidden to do so according to Paul's epistle to James (5:12) in the Bible.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1121898/

Unlike medical doctors, scientists have never taken an oath as an ethical code of practice. But because of widespread concerns about dishonesty in the profession, over the years there have been many advocates for them to do so.

The Romans borrowed many of their pagan practices and gods from Greece. The chief Roman sun-god deity was Jupiter (equivalent to Zeus in Greece). However, during the time of Christ there was a massive change, when the first emperor of the Roman Empire, Gaius Julius Caesar Augustus (63BC – 14AD) became the chief ruler of Rome, ruling alone from 27BC until his death in 14AD. Like no other Roman leader, Augustus considered himself under the special protection of Apollo and even considered himself as his son.

During his reign he dedicated a statue of himself with the deity's attributes in Apollo's temple, and soon Apollo became the chief god in Rome, equal to Jupiter, where he called himself *Pontifex Maximus*.

After Augustus died, the worship of Apollo carried on in Rome and was later merged into the Roman Catholic Church, with the Pope taking over Augustus's role. Ever since that time, the Pope dressed himself in white as the incarnation of the heathen sun-god Apollo, and the wagon wheel of Apollo's sun-god golden chariot, the biggest still in the world today, became St. Peter's Square in the Vatican.

As the result of the Greek god of Light Apollo being worshipped in Rome, the Romans worshipped Apollo and Jupiter together on Apollo's former feast day in Greece on May 5th and renamed it the Festival of *Dius Fidius* which was celebrated every year. Apollo's Latin name, *Dius Fidius* means 'Divine Faith.' Apollo was the god who protected loyalty in commerce, contracts and the making of treaties, originally derived from the Sabinic god, *Semo Sancus.* Today the word *'sanction'* is derived directly from this god, which when used usually indicates the users of it are worshippers of Apollo. There even was a temple dedicated to him on the Quirinale Hill under the name *Semo Sancus Dius Fidus.*

In modern Greece, the heathen Greeks today still worship Apollo. The national emblem of Greece consists of a blue escutcheon (the background representing the sky) (now also the blue on the UN emblem) with a white cross (representing the sun-god Apollo) surrounded by two laurel branches (sacred to Apollo). In Rome, these laurel branches were sometimes substituted with olive branches. These are the two olive branches today surrounding the Earth on the UN logo.

Today in Greece the Greeks have a very special, over two thousand year old tradition, in which they celebrate "Name Days," or as they have been 'Christianized' are called 'Saint Days' which they celebrate with sweets and parties. They are much more important than birthdays. During these joyous celebrations each year it is customary to wish a person "*Hronia Polla,*" a term which means 'many happy years.'

Many of these Name Days have their beginnings way back in the epoch of ancient Greek mythology. The Name Day set aside for Apollyon (Apollo) in the Greek calendar is 5th June, the same day in Rome that is set aside for the worship of Apollo and Jupiter during the festival of *Dius Fidius.*

According to John in Revelation 9:11, Apollyon (Apollo) is the "angel of the bottomless pit" (Satan). This is why today the UNEP has declared the 5th June each year to be universally celebrated globally as – WORLD ENVIRONMENT DAY.

In Revelation 9:11, the angel of the bottomless pit is given his name both in Hebrew (*Abaddon*) and in Greek (*Apollyon*). It has long been considered that each of these words mean 'destroyer.' However, the Hebrew word is closely connected to the first 24 Hebrew words in *Strong's Hebrew and Chaldee Dictionary of the Old Testament,* which includes words like 'father' (*'ab' #1*), 'green' or 'a green plant' (*'eb' #3*) and the Hebrew month 'Abib' [Nisan] (*'abiyb' #24*) meaning 'to be tender green' i.e., 'a young ear of grain' or 'green ears of corn.' Hence, when the two Hebrew and Greek words are combined together, they more literally mean: "Green Plant Destroyer" or "Father of Green Plant Destruction." Reduce CO2 in the atmosphere, you destroy green plant growth.

World Environment Day on May 5th every year was established by the UN in 1972 to directly follow Earth Day on April 22nd established by UNESCO on April 22, 1970. What was the significance April 22? – It was precisely the 100th Anniversary of Lenin's birth.

But there is more. In Soviet Russia, Lenin's birthday was called a "*Subbotnik*" from the Russian word *subbota* meaning 'Saturday.' It originally was created by Jewish Subbotniks in

Russia and later reorganized by the Bolsheviks and Communists as a day of voluntary social work for the benefit of the whole community to unify people's spirit in socialism.

International Mother Earth Day: Later, just to remind everyone in the world what 'Earth Day' really is, a Roman pagan worship day consecrated to the mother-earth goddess on the annual equinox April 22 2009, Earth Day was re-affirmed by ALL the member states of the United Nations General Assembly under Resolution A/RES/63/278 to become **International Mother Earth Day**.

http://en.wikipedia.org/wiki/International_Mother_Earth_Day

This day, of course, is the modern equivalent of the old Roman Festival of *Parilia* consecrated to the god and goddess Pales celebrated every year in Rome on the April equinox – April 21st.

Yet amazingly, there are still millions of people alive today that support the United Nations Organization (which is unequivocally a RELIGION), who claim they are either agnostics or atheists who hate religion, yet they are among the most intolerant, pagan religious fanatics of all.

Creation or Evolution?

Inevitably the war over global warming, scientific consensus, and sustainable development comes down to faith in either one of just two basic opposing fundamentals – either the Bible's account of **Creation** is correct – or Charles Darwin's **Theory of Evolution** is correct. Either you believe the one or you believe the other, because the opposing views are so wide apart they are simply irreconcilable.

A website, http://www.skepticalscience.com/print.php?r=42 brings together a summary of what leading global scientific bodies and scientists predominantly believe about global warming. According to their statistics, 97% believe that global warming and climate change are caused by man, while about 3% don't.

On their website they have web-links to the main global organizations that either support or reject the two fundamental opposing positions. Of the 3% that don't, a link to the *Global Warming Petition Project* (formerly *Oregon Petition*) is made:

http://www.petitionproject.org/signers_by_last_name.php

On that website are reasons given by these mainly INDEPENDENT scientists rejecting anthropogenic global warming, with a full list of the names of the 31,487 individuals who have signed the petition in the US.

In opposition to this, the lists of the global scientific organizations representing the 97% of scientists who do support anthropogenic global warming are also listed. If you study the lists, ALL are either multinational, corporate or government funded. That old adage again, '*He who pays the piper, calls the tune.*' For the sake of brevity it is not possible to address all of them and show how they are all controlled by deeply religious pagans, so the foremost one will do. It is the Royal Society (United Kingdom).

Royal Society: While the Royal Society in London is not the biggest of the world's scientific organizations representing scientists, it is the oldest and by far the most powerful fellowship of scientists in the world.

It was founded in 1660 by a group of twelve scientists, led by Christopher Wren, many of whom were alchemists and Rosicrucian adherents who followed the ancient Egyptian and

Babylonian religions. Rosicrucian members were instrumental in officially founding the United Grand Lodge of England (of Freemasonry) later in 1717. Newton's trusted laboratory assistant, John Theophilus Desaguliers, also a member of the Royal Society, was instrumental with others in founding the Lodge. It was not until 1710, under the Presidency of Isaac Newton, that the Society acquired its own home, two houses in Crane Court off the Strand.

Sir Isaac Newton (1642-1727) was indisputably one of the greatest scientists of all time. He contributed a huge amount to modern science, like so many great scientists do. But he had a very 'dark side' and wrote many works about the occult teachings of the ancients. At the time of his death, Sir Isaac had 169 books on the topic of alchemy in his personal library. In his library he left behind a heavily annotated personal copy of *The Fame and Confession of the Fraternity R.C.,* by Thomas Vaughan, representing an English translation of *The Rosicrucian Manifestos* with other highly annotated books about the Rosicrucian Order. This alone does not prove Newton was a Rosicrucian, however, the *Ancient & Mystical Order Rosae Crucis* has always claimed Newton as part of its fraternity. During his life, Newton was regularly accused of being a Rosicrucian, as were many of the members of the Royal Society, although he never publicly identified himself as one. He was President of the Royal Society (1703-1727).

Copley Medal: Sir Godfrey Copley (1653-1709) was a wealthy landowner who was elected to the Royal Society in 1691. He helped fund the society, and provided a bequest of £100 to the society in London in 1709 which provided the funding for an annual award, the *Copley Medal*, still now the Society's premier award for scientific achievement. It is Britain's oldest scientific honour and the oldest surviving scientific award in the world. Charles Darwin was awarded the Copley Medal in 1864. The society's Latin motto is, appropriately, *Nullius in verba* 'Take nobody's word for it.' Perhaps we are all to blame – for not having been sharply warned by their motto, having listened to their many myths, fairy-tales and lies for so long?

Charles Darwin (1809-1882) It is fair to say that probably no other scientist in history has ever been a bigger liar or affected so many people than Charles Darwin. Yet the majority of scientists and schools all around the world today still continue to teach his *Theory of Evolution* from his *On the Origin of Species* as fact, when it is at best only a theory. Although not officially a Freemason (Luciferian) himself, both his father and grandfather most definitely were and they affected him greatly. Darwin's theory of evolution is based on Freemasonry (Luciferianism).

The story perpetrated in the late 1800s that Christians believed in a "flat earth" until Columbus's time, and for some time thereafter, began as a fictional plot that was elevated to be, supposedly, a "historical fact" by Darwinist scientists and other heathens who used it as a means to ridicule Christians, both Catholic and Protestant.

The popular lie that Christians believed the earth was "flat" up to the time the Catholic Church condemned Galileo (1564-1642) in 1632 for his heretical notion following the teachings of Copernicus (1473-1543) that the earth was a round globe hurtling through space around the sun is still perpetuated today.

The fact is, the spherical shape of the earth was known to the ancient Greeks long before the time of Christ. In about 150 BC, the Greek astronomer Eratosthenes had already [remarkably] calculated the diameter of the earth and measured the 25,000 mile circumference of the earth using geometry to within 3.5% of its true distance that we believe it to be today. He used a variety of methods, including the length of a shadow cast in

Alexandria (Egypt) and noted that no shadow was cast near Aswan (Egypt) during the summer solstice.

While many of the pagans surrounding Israel may have believed the earth was flat in earliest times, the fact of the matter is, long before Eratosthenes even lived, the Bible's book of the prophet Isaiah (740-681 BC) indicated the earth was round (Isaiah 40:22 King James Version). However, if the real truth be told, it's now not an army of pagan scientists that genuine Christians have got to worry about – it's their very own corrupt New Age modern Bible version scribes and scholars who have deceptively REMOVED the word "circle" from Isaiah 40:22! This has happened in such new versions as the *Common English Bible*, *God's Word Translation* and *New International Reader's Version* – when in the genuine *Ben Chaim Masoretic Hebrew Text* the Hebrew word is most definitely "circle." Perhaps the modern Bible version editors, too, are now become Darwinian pagans as well?

The Bible is simply full of references to the sun, moon, stars, and passages in the New Testament such as Luke 17:334-36 most definitely indicated that the earth was a "globe" – over a thousand years before either Galileo or Copernicus were even born!

Covering up public health effects: Chernobyl, Fukushima, Roundup, Agent Orange, Drugs and Vaccines, etc.

More and more evidence is arising now showing how aligned politicians, business executives, scientists and doctors have consistently lied about adverse health effects of various products for decades to line their hip pockets and business interests – to prostrate themselves at the feet of the goddess Juno Moneta on Capitoline Hill. The main issue is not usually lack of knowledge. It is lack of honesty and the courage to speak up when they very well know they should do so.

Tobacco: Today it is well known that in the 1950s many medical doctors employed by the tobacco industry lied as witnesses in court cases about the role of tobacco as one of the major causes of lung cancer.

Chernobyl & Fukushima: In more recent times, it is well documented how many scientists and individuals linked with corporations or agencies involved with disasters in the nuclear power industry have consistently lied about the true radiation contamination levels in the environment producing serious adverse health effects on animals and humans. http://deepseanews.com/2013/11/true-facts-about-ocean-radiation-and-the-fukushima-disaster/

Monsanto Company – LEDs, GM Food, Dioxins & Roundup: Apart from lying about the serious adverse health effects of LEDs, as the first company in the world, in 1968, to start the mass production of [visible light] light emitting diodes (LEDs), using gallium arsenide phosphide – which ushered in the global era of solid-state LED lighting developing now – thousands of Monsanto chemists, doctors and scientists have been consistently caught out making fraudulent claims for decades.

For example, in 1984, Monsanto and Dow Chemical Company agreed to pay a $180 million settlement to American War veterans who complained of long-lasting health effects from the use of Agent Orange. In January 2006, the Seoul High Court ordered that Monsanto and Dow Chemical pay $62 million in compensation to about 6,800 people, and two lawsuits since then filed in 1999 seek more than $4 billion from these companies. Since then Monsanto's pharmaceutical business Pharmacia, is now part of Pfizer and its chemical business was spun off as Solutia.

Today Monsanto comprises the agricultural business alone, which now focuses on Genetic Modification, Genetic Engineering crops and related products. Increasingly it is becoming well known that GE crops seriously damage animal health and the widespread use of Monsanto's Roundup herbicide (glyphosate) is being linked with a wide variety of plant and animal diseases including Parkinson's, infertility, birth defects and cancer – yet there are numerous reports that Monsanto's chemists, doctors and scientists have been well aware of these adverse health effects from day one. Long before the British military used Herbicide Orange (HO) in the Malayan Emergency and the American military used Agent Orange during the Vietnam War from 1961 to 1971, scientists were well aware of 2,4,5-T and 2,4-D's long-term serious health effects.

In 2005, former New Zealand Transport Safety Minister, MP Harry Duynhoven, created a sensation by claiming that the Dow plant in New Zealand at New Plymouth had secretly made and exported large quantities of Agent Orange in the 1960s, that Dow knew was deadly poisonous, which was shipped to Mexico and Subic Bay in the Philippines then on-shipped for use in the Vietnam War – contradicting years of categorical denials by Ivon Watkins Dow that this was never the case at all.

http://www.bhopal.net/worldmap/new_zealand_more.html
http://www.reuters.com/article/2013/04/25/roundup-health-study-idUSL2N0DC22F20130425 http://www.organicconsumers.org/dioxcov.html

Much more recently, in April 2014, ***honest*** scientists from Arctic University in Norway reported that they detected "extreme levels" of Roundup, the agricultural herbicide manufactured by Monsanto, in genetically engineered soy.

Their study, which they reported would be coming out in June 2014's issue of *Food Chemistry* available online, looked at 31 different soybean plants on Iowa farms that were sprayed with roundup to get rid of weeds. In 1999, Monsanto scientists defined an "extreme level" of the herbicide as 5.6 grams per kilogram of plant weight. Astonishingly, the Norwegian scientists found a whopping 9 grams of Roundup per kilogram on average. What it boils down to is this: every time we eat GE soy we are taking a dose of Roundup with it.

Recently, a study led by German researchers warning of Roundup health hazards, published in the journal *Environmental & Analytical Toxicology,* found high concentrations of glyphosate, the active ingredient in Roundup, in the urine of dairy cows and humans. http://www.activetpost.com/2014/04/extreme-levels-of-herbicide-roundup.html

Vaccines & Autism: On April 13, 2014, *Health Impact News Daily* published a lead article by Tim Bolen, *Vaccine Autism Cover-up Exposed by Fraud*. Tim writes,

"The "Danish Study" has been used as the foundation of the vaccine industry's claim that "*there is no relationship between vaccines and Autism*." But its author, Danish researcher Poul Thorsen, last year, was indicted for fraud over the study, and an arrest warrant was issued. Thorsen is now hiding.

It is common knowledge that the pharmaceutical industry promotes a severely increased vaccine schedule, not only for children, but for everyone, sometimes even, trying for laws making vaccines mandatory. Why? Because most of the major drug patents are running out, so the massive flow of money is slowing to a trickle. More vaccines seem to be the profitable answer. But, as everyone is also realizing, with the increased schedule came a comparable wave of significant health problems. One in six children since the increase, now

have neurological issues. One in eighty-eight children now have Autism. But the vaccine construction, a combination of the vaccine industry, and the federal and state bureaucratic entity that supports it, rail against any suggestion that vaccines are responsible. That conflict, between parents of these children and their networks and the vaccine construction, rages across not just the US, but all over Planet Earth."

Much more about the vaccine connection with autism is revealed in the article: http://healthimpactnews.com/2012/vaccine-autism-cover-up-exposed-by-fraud/

Recent Gardasil Scandal: On April 21, 2014, *Health Impact News Daily* published an article titled, *Merck's Former Doctor Predicts that Gardasil will Become the Greatest Medical Scandal of All Time.* The article quoted excerpts from an interview with Dr Dalbergue, a former pharmaceutical industry physician with Gardasil manufacturer Merck, in the April issue of the French magazine *Principles de Santé* (Health Principles). In that interview, Dr Dalbergue said:

"I predict that Gardasil will become the greatest medical scandal of all times because at some point in time, the evidence will add up to prove that this vaccine, technical and scientific feat that it may be, has absolutely no effect on cervical cancer and that all the many adverse effects which destroy lives and even kill, serve no other purpose than to generate profit for the manufacturers… There is far too much financial interest for these medicines to be withdrawn."

The article continues, "As we have reported in many previous articles here at Health Impact News, the HPV vaccine has become a huge international controversy, while enjoying widespread mainstream media and medical acceptance here in the United States. Any mainstream media reporter who dares to report on the controversy surrounding Gardasil faces ridicule and a potential loss of their career. (Just ask Katie Couric.)"

U.S. law prevents anyone from suing Merck or any other vaccine manufacturer as the U.S Congress gave them total immunity from civil lawsuits in 1986, and that legal protection which gives them a free pass to put as many vaccines into the market as they want to, was upheld by the U.S. Supreme Court in 2011. In addition, the National Institute of Health receives royalties from the sales of Gardasil. So don't expect objective, true information from the U.S. mainstream media, or your doctor.

http://healthimpactnews.com/2014/mercks-former-doctor-predicts-that-gardasil-will-become-the-greatest-medical-scandal-of-all-time/

So are all doctors and scientists sun-god worshippers and liars? No, this is absolutely not the case at all. Some are very dedicated, honest people committed to helping humanity – and the good ones deserve our unreserved admiration and praise to be sure.

But let's not deceive ourselves. We all now do need a very high level of *discernment* to separate the good from the bad.

The fact remains, a huge proportion of doctors and scientists are caught up in a vice-grip of a long established paradigm, are compulsive pagans and liars, and will do almost anything for a dollar. Therefore we should be very wary of all of them and take care to wisely distinguish between the two.

CHAPTER SIX

THE SPIRITUAL DIMENSION: WAR BETWEEN CHRIST AND LUCIFER

Just how Christ and Lucifer could be directly involved with the global production of light bulbs may seem laughable or downright absurd. But it is not.

To even suggest there may be strong "spiritual powers" at play influencing all major world events, political parties, global leaders, global organisations, religious groups, commercial products, entertainment, music, and the LIGHT BULB INDUSTRY – most people will immediately pull back or just switch off because they can't physically see them or the mere thought upsets their comfort zone.

However, numerous religious leaders, occultists and Christian leaders (even though their beliefs are often vastly different) all UNDERSTAND in one way or another, that it is *spiritual power* that ultimately rules the world – not money or physical might.

It's a little bit like the electromagnetic spectrum. The human eye can see only certain frequencies of light in the electromagnetic spectrum. It cannot see gamma rays, x-rays, ultraviolet (UV), infrared, microwave or radio waves. But just because we physically can't see them, it doesn't mean they are not there and can't affect us. So it is with spiritual power.

Since our main subject here is about light bulbs and how LEDs will affect global lighting and human health, it is important to understand how this massive transformation throughout the world at present is being driven by a war between two very different, opposing spiritual forces. These powers are essentially those of Christ and those of Lucifer (in the Bible, another name for the Devil or Satan).

On the one hand, the power of Christ is to bring TRUE LIGHT into the world to help people, cure blindness, and ultimately give people everlasting life. On the other hand, Lucifer wants to bring ARTIFICIAL LIGHT into the world to curse people with blindness and ultimately destroy everything. To help illustrate this point some quotes from the KJV Bible follow:

Jesus Christ

"*For with thee is the fountain of life: in thy light shall we see light.*" (Psalm 36:9).

"*Then spake Jesus again unto them, saying, I am the light of the world: he that followeth me shall not walk in darkness, but shall have the light of life."* (John 8:12).

Christ said to his followers (today all genuine Jewish and Gentile Christian believers):

"Ye are the light of the world. A city that is set on an hill cannot be hid. Neither do men light a candle, and put it under a bushel, but on a candlestick; and it giveth light unto all that are in the house. Let your light so shine before men, that they may see your good works, and glorify your Father which is in heaven." (Matthew 5:14-16).

"Every good gift and perfect gift from above, and cometh down from the Father of lights, with whom is no variableness, neither shadow of turning." (James 1:17). Here we see that God the Father is the FATHER OF LIGHTS as well.

However, opposing Christ is Lucifer.

Lucifer

The name "Lucifer" is the only name in the entire Bible directly connected to modern lighting and light bulbs.

The term "Lucifer" is one of the most controversial words in the entire Bible. The word is only used once in the King James Bible (KJV) where it is found in Isaiah 14:12. The Hebrew word in Isaiah 14:12 is also unique, appearing only once in the Old Testament *Ben Chaim Masoretic Hebrew text* from which the KJV was translated. In Hebrew it is transliterated as *heylel* (Strong's Hebrew #1966 'brightness,' 'morning star,' from Strong's #1984 'to shine'). However, this is one of the rare occasions, where the KJV translators did not directly translate the word straight from the Hebrew text but took it from Isaiah 14:12 in the *Latin Vulgate* – which reads;

Latin Vulgate: *"quomodo cecidisti de caelo lucifer qui mane oriebaris corruisti in terram qui vulnerabas gentes."*

King James Bible: *"How art thou fallen from heaven, O Lucifer, son of the morning! How art thou cut down to the ground, which didst weaken the nations!"*

Even though the fifth word of the Latin text *'lucifer'* above in Isaiah 14:12 is not capitalized as a proper name in the Vulgate, and it occurs elsewhere in the Latin Vulgate in Isaiah 14:12, Job 11:17, Job 38:32, and 2 Peter 1:19, where the KJV translators rendered it 'morning' – the KJV translators chose to follow the 1599 Geneva Bible to capitalize it and use it as a proper name in the KJV.

Most modern translations have removed 'Lucifer' as a person (Satan) from the text in Isaiah 14:12. Here are some examples where they have changed him into the "son of dawn" (Hebrew Transliteral, CLV), "O shining one, son of the dawn" (YLT), "O light-bringer and daystar, son of the morning" (TAB), "O Day Star, son of Dawn" (NRSV), "O day-star, son of the morning" (Dead Sea Scrolls Bible), "Daystar, son of Dawn" (The Jerusalem Bible), "O Shining One, son of Dawn" (Tanakh), "O star of the morning, son of the dawn" (NASB), "O morning star, son of the dawn" (NIV 1984) etc.

The reasons why these spurious modern versions are totally wrong, and the KJV translators were divinely inspired to choose the correct word 'Lucifer' and not any other word are many.

The first reason is that the context of Isaiah 14:12-17 is a PROPHECY not only speaking about the king of Babylon. It is speaking about a particular person, A MAN inspired by Satan in his most deceptive form – Lucifer – not a "bright and morning star." Here is the full text (emphasis in bold print added):

*"**How art thou fallen** from heaven, O **Lucifer**, **son** of the morning! How art thou cut down to the ground, which did weaken the nations! **For thou hast said in thine heart**, **I** will ascend into heaven, **I** will exalt my throne above the stars of God: **I** will sit on the mount of the congregation, in the sides of the north: **I will ascend above the heights of the clouds; I will be like the most High**. Yet thou shalt be brought down to hell, to the sides of the pit. They that see thee shall narrowly look upon thee, saying, Is this **the man** that made the earth to*

tremble, that did shake kingdoms; ***That made the world as a wilderness, and destroyed the cities thereof****; that opened not the house of his prisoners?"* (Isaiah 14:12-17).

The second reason is that Revelation 22:16 informs us that **only Jesus Christ is "the BRIGHT AND MORNING STAR".** When "Lucifer" is removed from Isaiah 14:12 and replaced with "bright and morning star" in spurious modern Bible versions, this makes Satan the same person as Jesus Christ.

In the reference in Revelation 22:16 relating to Jesus Christ, the special Greek word used for 'bright' is *lamprŏs* (Strongs #2986 – magnificent, bright, clear, gay, **goodly, gorgeous white**) which is entirely different to *astrapē* 'lightning' (Strongs #796) in Luke 10:18, and *phōs* 'light' (Strongs #5457) in 2 Corinthians 11:14 which relate to Satan's COUNTERFEIT AND DESTRUCTIVE "light".

The Greek word *phōs* is a root of the Greek word ***Phosphorus*** and ***Eosphoros*** the equivalent of which in Latin is ***Lucifer*** = "Light-bringer." The Greek god Phosphorus (Light-bringer) was simply the Greek equivalent of the Roman god Lucifer.

The third reason is that this prophecy about Lucifer in the first four words of Isaiah 14:12 "How art thou fallen" are again referred to by Christ in Luke 10:18, "And he said unto them, I beheld Satan as lightning fall from heaven."

The fourth reason is that the apostle Paul in 2 Corinthians 11:14 confirmed, "And no marvel; for Satan himself is transformed into an angel of light."

The fifth reason is "In the mouth of two or three witnesses shall every word be established." (2 Corinthians 13:1, Deuteronomy 19:15). Isaiah, Jesus Christ and Paul all support this reading in the KJV.

The sixth reason is that Christ advised his disciples to follow this advice: "Wherefore by their fruits ye shall know them." (Matthew 7:20). In the following pages the author will show how the "fruits" of those who worship Lucifer, (Satan's modern "light-bringers"), are now specifically LED light products that are soon going to send the world blind, if not changed, filtered or abolished.

The verses in Isaiah 14:12, Luke 10:18 and 2 Corinthians 11:14 all relate to "Lucifer and Satan as an angel of light" and are literally being fulfilled today by all people who worship Lucifer as Christ. In John 10:10, Christ warned, "The thief cometh not, but to steal, and to kill, and to destroy…" and it is Lucifer, himself, that is using LEDs to rob people of their sight.

Here is an outstanding website showing how all Freemasons today (and many of them are world leaders such as President Obama) literally worship Lucifer. The website includes copies of pages from *Morals and Dogma* (the 'Bible' of Scottish Rite American Freemasonry) with references to their worship of the Roman god Lucifer, or the Greek god Phosphor. **The site also includes an excellent video clip of an revealing interview with a Freemason personally testifying that he worships Lucifer as Christ. http://crossbearer-brian.tripod.com/id288_m.htm**

The seventh reason, of course, is the transformation of the world to LED LIGHTING: The word ***Lucifer*** comes from two Latin words ***Lux*** 'Light' and ***ferous*** 'to bear or carry' = literally **"Light-bringer."** Do you know that today the actual international word for the measurement of 'light intensity' is '*Lux*,' the root word for Lucifer, and that a primary compound used in the manufacture of all fluorescent lamps and LEDs is ***Phosphor*** the literal Greek god of light and Greek word for Lucifer?

Remember? The main message in this book alleges, unless they are abolished, radically modified or filtered, all LED light bulbs are going to curse the whole world with blindness!

Coming Judgment on the whole world: Blindness through LED lighting

In Deuteronomy chapter 28 God made some amazing promises to Israel (which are still current), in which he guaranteed wonderful blessings for obedience and terrible curses for disobedience. In fact, with his promises for obedience he gave his personal assurance that he would set Israel on high above all nations of the earth. However, if Israel were to reject his wonderful assurances, and depart and go after other pagan gods, he promised to bring a number of terrible curses upon the nation. **One of those curses was BLINDNESS.**

"The LORD will smite thee with madness, and blindness, *and astonishment of heart: And Thou shalt grope at noonday,* ***as the blind gropeth in darkness****, and thou shalt not prosper in thy ways: and thou shalt be only oppressed and spoiled evermore, and no man shall save thee."* (Deuteronomy 28:28-29).

One of the main, cruel practices of pagan kings throughout history, and especially in relation to Israel, has been the habitual action to put out the eyes of their captives and enemies, thus making them blind. When Israel had finally become so corrupt, decadent and had followed pagan gods, having repudiated the wonderful promises previously given to the nation (in Deuteronomy), God then raised up the pagan king of Babylon, Nebuchadnezzar, as his personal servant, to come and desolate Jerusalem. In the process Nebuchadnezzar brutally slew all the sons of Zedekiah, the wicked king of Judah, before his very eyes, and then put out his eyes, bound him in chains, carried him to Babylon and put him in prison till the day of his death. (Jeremiah chapter 52).

Following this, God, through the prophet Zechariah, (Zechariah 12) gave Israel and the Gentile nations a unique prophecy (which many Jews and Christians believe is NOW BEGINNING TO BE FULFILLED TODAY) of God's special promise and love, in spite of Israel's obstinate rebellion and unfaithfulness, to miraculously restore Judah (Jews) to Israel and finally bring glory to the inhabitants of Jerusalem – while all nations of the earth are gathered together seeking to destroy it. Gradually, the whole world's focus will be on Israel.

When this prophecy reaches its fullness, during this chaotic time, Jerusalem is literally going to become "a cup of trembling" and "burdensome stone for all people" on earth that have turned away from God and gathered together against it. Again, one of the features of this time is going to be **blindness**:

- *"In that day, saith the LORD, I will smite every horse with astonishment,* ***and his rider with madness:*** *and I will open mine eyes upon the house of Judah, and will* ***smite every horse of the people with blindness****."* (Zechariah 12:4).

In the New Testament, when Christ came into the synagogue at Nazareth on the Sabbath day, he first referred to the prophecy of himself in Isaiah:

"And there was delivered unto him the book of the prophet Esaias. And when he had opened the book, he found the place where it was written, The Spirit of the Lord is upon me, because he hath anointed me to preach the gospel to the poor; he hath sent me to heal the brokenhearted, to preach deliverance to the captives, ***and recovering of sight to the blind,*** *to set at liberty them that are bruised, To preach the acceptable year of the Lord."* (Luke 4:17-19). Indeed, Christ again repeated of himself:

- *"And Jesus said, For judgment I am come into this world,* ***that they which see not might see; and they which see might be made blind.****"*

Right now, in the year 2014, most of the world and the former great 'Christian nations' are rapidly turning away from their early faithfulness to God in their spiritual blindness to worship these ancient pagan gods. Like ancient Israel, could their final judgment be inevitably becoming too – in the form of a subtle curse – physical blindness through LED light?

Blindness in pagan Greek myth and worship

Today most agnostics and atheists will all try and claim they are not at all religious, but the truth is they are often the most religious fanatics of all. There are no exceptions to this delusion.No better is this aptly illustrated than through the United Nations Organization, where the old Greco/Roman deities now reign supreme. Today they are once again the *literal patrons* over the nations as they were over two millennia ago in ancient Greece and Rome.

In ancient Greece the supreme deity and light-giver was Zeus, the supreme sun-god and father of the gods. To celebrate the fact that Zeus is now also the "father" of the United Nations Organization, a large statue of him welcomes everyone who enters the Main Lobby of the UN General Assembly Building in New York City. The statue was presented to the UN by the Greek government in 1953, and is a replica of an original in Athens. Around 1966 the Greek government informed the UN that further archaeological research established that the figure represents 'Poseidon of Artemission,' but many Greek scholars dispute this because the statue shows the god holding up his right hand holding in his fingers an *invisible lightning bolt*, a typical representation of Zeus, not Poseidon (Roman- Neptune). The deity is Zeus!

Connected to Zeus, the father of the gods, welcoming everyone to the UN Headquarters, is the 'spiritual heart' and chapel of the religious organization – the UN Meditation Room. It was meticulously created, personally planned and supervised in every detail of its construction in 1953 by the Secretary-General of the UN, Dag Hammarskjöld, a Swedish pagan and socialist. Its main feature, the only symbol in the room, is a giant six-and-half-ton rectangular cube block of black iron ore, polished on the top and illuminated from above by a single spotlight. (This single spotlight represents the *lightning bolt* of Zeus, through his light-bringer, Lucifer, bringing light to the Earth). It was a gift from the king of Sweden and a large Swedish mining company. When Hammarskjöld installed it he described it as; *"… a meeting of the light, of the sky, and the earth … it is the altar to the God of all … we want this massive altar to give the impression of something more than temporary …"* http://www.un.org/Depts/dhl/dag/meditationroom.htm

In British Israel World Freemasonry and ancient witchcraft, a black stone cube has always represented the pagan 'supreme sun-god deity.' This cube is sometimes called the 'Stone of Foundation' or 'Philosopher's Stone.' http://www.whale.to/c/black_cube.html http://www.sacred-texts.com/mas/sof/sof32.htm

In Islam, Moslems pray to and worship a black stone cube called the Kaaba with a Black Stone in its eastern corner, in Mecca, Saudi Arabia. During the ceremony, Moslem pilgrims must walk around the Kaaba seven times in an anti-clockwise direction during the Circumambulation ritual (following the course of the sun-god) emulating the footsteps of Muhammad, each time kissing the Black Stone in the eastern corner (to worship Lucifer, the Light-bringer and the rising sun). http://en.wikipedia.org/wiki/Black_Stone

In Greek mythology and worship, the lightning/thunder bolt was given to Zeus by the Cyclops, a giant with a single eye in the middle of the forehead, and it was seen as the unsurpassed retributive weapon of divine destruction. In ancient Egypt, this 'single eye' was called the 'eye of Horus', in Rome, the 'eye of Lucifer.'

For many years the Lucis Trust, founded by occultists in the early 1920s as Lucifer Publishing Company, ran the UN Meditation and Prayer Room. Over many years Lucis Trust with its kindred agency, World Goodwill has been an NGO at the UN and one of the main Luciferian inspirations behind the socialist body. http://en.wikipedia.org/wiki/Lucis_Trust

Anyone who has made a deep study of Greek myth and worship will know that there is a recurring theme in it of severe punishment administered by the gods – BLINDNESS.

- Zeus ends the Titanomachy (the Titan rebellion against the Olympians) by blinding the Titan with his flash of lightning.
- Zeus's enemy, Typhoeus, is a threat because of his hundreds of flame-spurting eyes. The power to force blindness is positioned as a defining power in conclusive defeat – by having Apollo and Heracles then shoot out Ephialtes' eyes.
- Perseus continues the institution of blindness in order to subdue in stealing the Graeae's eye and continue his quest.
- Argos, in closing his eyes, being blinded, is vulnerably to Hermes who then decapitates him.
- Metope is punished by her father Echetus with blindness and must work to regain her sight.
- Alcmena's mutilation of Eurystheus' eyes is performed after his decapitation in order to humiliate him.
- Polymestor's punishment for the murder of Hecabe is blindness.
- People are often blinded for offences against the gods. Erymanthos after he saw Aphrodite bathing. Stesichorus on insulting Helen, the daughter of Zeus who was caught up in the Trojan war.
- Poseidon temporarily blinds Archilles' eyes to stop him killing Aeneas.
- Orion is blinded as a punishment for rape, but he regains his sight upon seeing Helius, the sun. [Blinding punishments don't hold for the gods as they do for all humans without divine favour!].
- There's also a strong association between blindness and musical talent. The talented piper Daphnis' blindness is another example of removal of sight at the hands of supernatural forces.
- Atê, is the spirit of delusion and blind folly. She is also known as Ruin, as she leads all who follow her astray by causing them to become 'blinded' to their mistakes and often insane.
- Athena describes the madness she institutes on Ajax, saying she will make his eyes dark although he still is sighted.

This is why in real life people who worship these gods replicate these same practices themselves!

Apollo and Artemis

Jupiter, Apollo and his twin-sister Artemis the huntress (Roman name: Diana) were the three principal pagan deities that were worshipped at the time of Christ (Acts 14:11-19, Acts 19:27, Acts 19:35). Gaius Julius Caesar Augustus (63BC – AD14) ruled Rome from 27BC to

AD14. Like no other pagan Roman leader, Augustus considered himself under the special protection of Apollo and even considered himself as his son.

Although not widely yet admitted by most, today the majority of leading women in the world still worship the mother-earth goddess Artemis, the twin-sister of Apollo, just as they did at the time of Christ. Here is a short YouTube clip of Melanne Verveer, (Ambassador-at-Large for Global Women's Issues, US Department of State, Washington D.C.) delivering her speech by video on receiving the award at the 15th Annual 'Global Goddess Artemis Awards Ceremony' at the Euro-American Women's Council in Greece in 2011. http://www.youtube.com/watch?v=Pj1oUR2Z3L8

Here is a splendid picture of **The Artemis Award** shown at a special presentation in June 2009, in gold, showing the Greek goddess Artemis (Roman Diana) sitting upon the Earth being worshipped, with a writhing serpent around her neck representing Satan: http://artemisawardgreece.blogspot.co.nz/2009/06/june-15th-global-artemis-award.html

Here is an eye-opening, revealing article transcript of Melanne Verveer's Artemis speech: http://www.state.gov/s/gwi/rls/rem/2011/176174.htm Founded in 1996, the Euro-American Women's Council's (EAWC) mission is to greatly strengthen the status of women and build a strategic alliance between leading business women and prominent women world leaders across entire globe with the United Nations Organization. http://www.dailykos.com/story/2009/12/27/819580/-The-Euro-American-Women-Council-s-Infatigable-Loula-Loi-Alafoyiannis

In the following link is a report about the planned Euro-American Women's Council Global Forum and Awards set for Athens in July 2014. Following the ceremony and presentation of *The Artemis Awards* in the Forum, the honourees will then tour Cape Sounion, the site of the ancient Temple of Poseidon and then visit the sacred island of Delos, birthplace of the goddess Artemis and Apollo. http://www.huffingtonpost.com/jim-luce/euro-american-women-s-cou_b_596232.html

Apollo was the special son of Zeus and Leto, a powerful deity in both Greece and Rome, admired by almost everyone who felt in day to day living they had a special affinity with him as a bright young man, rather than Zeus his father. Accordingly, he was not only god of light and the sun, but he wore many hats and was the god of truth and prophecy, healing, plague, music, poetry, and much more. Apollo was introduced to Rome from Greece as a healing god in the fifth century B.C. as the result of a serious attempt to cure a devastating epidemic. But as time passed, gradually he was no longer only confined to the domain of medicine as he took on the Greek 'darker side' being recognised also as a murderer and destroyer. The name Apollo or Apollyon in Greek literally means 'destroyer.'

Phoebus Apollo

In ancient Greece, Apollo had a number of epithets applied to him, reflecting the huge variety of his roles, duties and aspects. Chief among them was *Phoebus,* a name which literally means '*the radiant one*.' This name was given to him because of his connection with the sun and as a descendant of the Titaness Phoebe, his grandmother. Phoebe is the feminine equivalent of Phoebus. The name Phoebus was used by both the Greeks and Romans for Apollo in his sun-god role as *god of radiant, bright light*. The Romans referred to him sometimes simply as Phoebus or alternately as Phoebus Apollo.

But although, Phoebus Apollo, as god of the sun and god of light with his life-giving power, who by his gentle influence dispels the cold of winter, he is, at the same time, the god who,

by means of his powerful darting rays, could suddenly spread disease and death to men and animals. When he did this it was often with the assistance of his twin sister Artemis as the moon goddess, in her sadistic role as the divinity of death. Those who were diseased or died in the bloom of youth or those who died at an advanced age, were all believed to have been killed by Phoebus Apollo and Artemis's gentle arrows.

But Phoebus Apollo did not always impart an easy death as the gentle god of light. At times he fulfilled more the role of the angel of death. In the *Iliad*, when angry with the Greeks, the "god of the silver bow," strode down from mount Olympus, with his quiver full of death-bringing darts of light, and deceptively sent a raging pestilence into the camp. For nine days he relentlessly let fly with his poisoned arrows, first on animals and then on men, till the air became darkened with putrid smoke from the funeral pyres.

PHOEBUS APOLLO in Greek mythology, therefore, was the most subtle and cunning benevolent incarnation of Satan of all. In ancient Rome he almost deceived everyone!

On the one hand, he was characterized in statues and sculptures as an innocent, naked, pure, blue-eyed, handsome young man, clean-shaven and carrying either a lyre, or his bow and arrows. He was a Christ-like figure who promoted peace and harmony, he was god of prophecy, philosophy, colonization, medicine, healing, archery (but not for war or hunting), poetry, dance, music, agriculture, trees, protector of cattle and fruit trees, herds and flocks, shepherds, protector of pastures, the elimination of plagues and the giver of divine guidance.

But on the other hand, deceptively lurking beneath his innocent blue eyes and youthful posture, was a wicked split personality. He was a sexual deviant, had very few morals when it suited him, and he became a ruthless tyrant when he got angry. With Artemis, his wife and sister, he cold bloodedly murdered the Niobids with his poisoned arrows of light. He sent the deadly plague on his enemies. At times he was miraculously transformed into both a serpent and a dragon. In short, he was the Satan in disguise.

The prophetic book of Revelation in the Bible accurately reveals a sequence of world events (that many people believe are beginning to take place now) which will immediately take place heralding the second coming of Jesus Christ, the battle at Armageddon and the final redemption of Israel. During this terrible time Satan proceeds forth in his attempt to destroy the world. Included in these momentous events is the creation of a world government, world Luciferian religion, and a devious plan to mark everybody on earth in their right hand or in their forehead for all buying and selling. By the time this diabolically evil period is finished, following Armageddon, about two-thirds of the world general population will have all been killed by a series of terrible plagues and destructive events.

Apollo and locusts

During these cataclysmic events, the Greek god Phoebus Apollo *('Apollyon'* – 'Destroyer') has a huge part to play fulfilling his death-bringing role as the deceptive global *"angel of the bottomless pit." (Revelation 9:11).* Indeed, John in Revelation 9 directly uses Phoebus Apollo's and Lucifer's characteristics in the Greek myths to describe him:

- "**And I saw a star fall from heaven"** (Rev.9:1), ["**How art thou fallen from heaven, O Lucifer**," (Isaiah 14:12) "**I beheld Satan as lightning fall from heaven**" (Luke 10:18), "And no marvel; for Satan himself is **transformed into an angel of light**." (2 Cor. 11:14).] "…and to him was given the key of the bottomless pit." (Rev. 9:1)

- *"And he opened the bottomless pit; and there arose a smoke out of the pit, as the smoke of a great furnace; and the sun and air were darkened by reason of the smoke of the pit. And there came out of the smoke locusts upon the earth: and unto them was given power, as the scorpions of the earth have power."* (Rev.9:2-3).

One of the ancient symbols of Apollo was the locust. Apollo in Greek myth was the King of Locusts. In fact, a brass statue created by the famous Greek sculpture Phidas located on the Acropolis in Athens was called *Apollo Parnopios* because of his close relationship with locusts (Greek: *parnopes* 'locusts'*).*

- *"And they had a king over them* (Apollo), *which is the angel of the bottomless pit, whose name in the Hebrew tongue is Abaddon, but in the Greek tongue hath his name Apollyon."* (Revelation 9:11).

This reference to "locusts" in Revelation 9 is usually understood to be metaphorical, not literal. However, within the last 10 years, scientists at the University of Oxford in 2009 studying locusts have discovered some amazing things about them. Usually they live as mild-mannered, solitary grasshoppers for all of their lives and never bother anybody. They can spend many generations in a form that not only doesn't swarm but is actively repelled by other locusts.

What scientists uniquely discovered was that before they are transformed into a notorious, biblical-like swarming plague, a radical change first takes place. What happens is that inside the insect's nervous system, there is a steep rise in a brain chemical called serotonin. The more serotonin an insect has, the more gregarious it becomes. In the lab the researchers were able to manipulate serotonin levels by giving the locusts certain drugs. Certain drugs that blocked serotonin made solitary locusts stay shy, even in conditions that would normally make them attracted to others. Drugs that boosted serotonin made solitary insects suddenly act more gregarious. For many years scientists have known serotonin levels dramatically influences other species as well including human behaviour and health. And they also know blue light levels uniquely regulate the production of serotonin in animals and humans.

http://wwwbluelight.org/vb/archive/index.php/t-436011.html
http://www.cam.ac.uk/research/news/a-brain-chemical-changes-locusts-from-harmless-grasshoppers-to-swarming-pests

All incandescent light bulbs emit a very small amount of blue light and their smooth spectral curve is similar to natural daylight late in the afternoon on a mid-summer day. Conversely, white LEDs are entirely different. They all emit a powerful, sharp spike of blue light that dramatically suppresses the production of the hormone melatonin (in a similar way to serotonin in locusts), which dramatically affects human circadian rhythms, behaviour and health. There is a close connection between the transformation of the world to "blue" LED light and the prophecy of Revelation chapter 9.

Unfortunately, PHOEBUS APOLLO never quite died in ancient Greece or Rome, did he? For he is still very much alive and well today – having been subtly reincarnated in the **Phoebus Cartel** in 1924 directly named after him, which now has become the **Global Lighting Association** – representing over 5000 giant multinational light manufacturing companies – with their shining quivers of poisonous darts – that are transforming the world toward LEDs – soon to cover the globe with a radiant blanket of glistening blue light toxicity – which will inflict a debilitating plague of universal blindness on everyone.

CHAPTER SEVEN

WHY THE SKY IS BLUE:
SUNLIGHT COMPARISON TO LIGHT BULBS

Creation

The third and fourth verses of Genesis chapter 1 describe how, after God created the heaven and the earth at the very beginning, he immediately then created "light" *"And God saw the light, **that it was good…"***

Today through modern science we know that everything about the creation of the earth is meticulously and delicately balanced, the rate of its rotation, magnetism, orbit, axis, distances from the sun and moon and so on are scrupulously exact. If we were just a bit too far away from the sun we would all freeze, and if we were a little too close we would all be burned to a cinder etc.

Now the intense solar radiation from the sun and reflected light and magnetism from the moon that predominantly affects the earth is also very precisely filtered, measured, and distributed before it can truly be classified as "good." It is a very complex system indeed and relatively minor changes in the sun's intensity or the way its radiation is carefully filtered can produce massive changes on the earth below.

Van Allen radiation belt

Prior to the 1950s nobody even knew what outer space was. Now we know very much more. The first and most outer protective shield around the earth is called the Van Allen Radiation Belt named after James Van Allen the NASA scientist who discovered it. The belt is in fact a number of distinct layers of energetically charged particles (plasma) that surrounds the earth held there by the earth's magnetic field varying from an altitude of about 1000kms to 60,000kms.

The majority of the particles, X-rays, energetic protons and electrons that form the belts are thought to come from atomic particles, cosmic rays and solar wind. Not all the particles and radiation comes from the sun as in recent times NASA has discovered more gamma rays come from the moon than the sun. The reason that the moon emits gamma rays is that the moon is being continuously bombarded by atomic particles that are coming from outside our solar system.

These intense radiation belts are highly toxic to human health and survival. That is one of the chief reasons why the International Space Station only orbits the earth at an altitude of about 330kms (205 miles) to about 400kms (248 miles), whereas the GPS satellites orbit the earth at about 11,000 nautical miles up. Here on earth usually when we look at the moon it appears white. However, if man could pass through the protective layer of the earth's atmosphere and Van Allen Radiation Belt, and if Gamma Rays (which are not part of the visible light spectrum) appeared purple to our eyes, and if we were then to view the moon it would be glowing purple, much more purple than the sun! Once past the Van Allen Radiation Belt, outer space is similar to the inside of a nuclear reactor, although not as

concentrated. It is still full of toxic radiation, gamma rays, X-rays and atomic particles, extremely detrimental to human health.

The Auroras

There is less protection from the sun's atomic particles at the north and south poles because the earth's magnetic field diminishes in strength at those locations. Some of the electrons and protons from the sun slam into the air molecules near the poles and when this happens it causes the atoms to glow, just like a neon lamp. These colourful Auroras are beautiful to behold, but if this happened over the entire earth it would be deadly. Both the earth's magnetic field and atmosphere shield us all from this huge amount of damaging radiation.

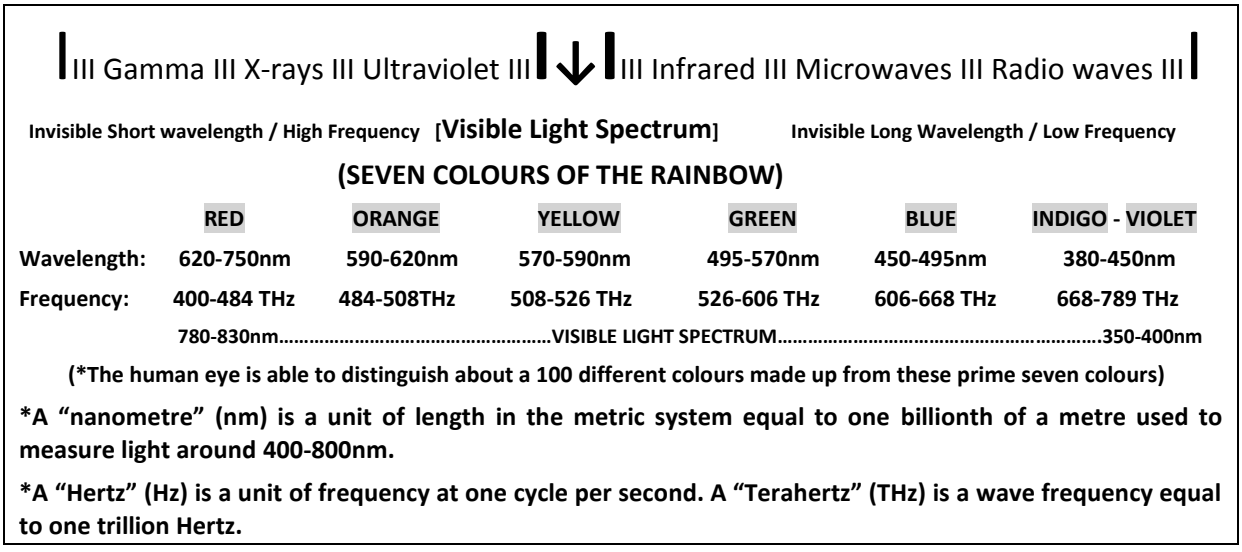
Atmosphere

The atmosphere is a mixture of gas molecules and other materials surrounding the earth. It is mainly made up of the gases nitrogen (78%) and oxygen (21%). Argon gas and water (in the form of vapour, droplets and ice crystals) are the next most common constituents in the atmosphere. There are also small amounts of other gases too, plus many small solid particles, such as dust, soot, ash, pollen and salt from the oceans. The composition of the atmosphere can vary considerably depending on the location, weather and many other things. Rainstorms, pollution, bush fires, volcanoes and dust storms can increase the amount of various particles in the air.

The atmosphere is densest and thickest at its bottom near the earth. The higher up in altitude you go the thinner it gets. There is no clearly defined break between the atmosphere and space.

Electromagnetic Spectrum

Light is made up of electromagnetic particles which travel or radiate through space in waves at 299,792 km/sec (186,282 miles/sec). This is called the speed of light. The specific ENERGY of radiation 'waves' depends on its wavelength and frequency. Wavelength is the distance between the tops (crests) of the waves. Frequency is the number of waves that pass by each second. The longer the wavelength of the light, the lower the frequency and the less energy it contains. Simplified, the whole electromagnetic spectrum is divided up into different "bands" of radiation wavelength/frequencies, and the visible part of it to human eyesight is called the "visible light spectrum." It is only a very small part of the full electromagnetic spectrum. It looks like this:



(*The human eye is able to distinguish about a 100 different colours made up from these prime seven colours)

***A "nanometre" (nm) is a unit of length in the metric system equal to one billionth of a metre used to measure light around 400-800nm.**

***A "Hertz" (Hz) is a unit of frequency at one cycle per second. A "Terahertz" (THz) is a wave frequency equal to one trillion Hertz.**

Number 666 and blue light

In Revelation 13:16-18, the number of the 'beast' (which requires a mark in the right hand or forehead for all buying and selling) that is prophesied to soon come linked to a new electronic cashless banking system on earth is "Six hundred threescore and six" (666). In the Bible, the number 6 is the number of man, and 666 is the number sealed on man turning away from God while worshipping the sun. In ancient Babylon, the zodiac was divided up into twelve signs through which they believed the sun would travel each year around it. These signs were further divided up into three parts of 10 degrees each called decans to which an individual god or genius was assigned. The sum total of these 36 decans all together represented the full 360 degrees travelled by the sun. When the numbers of all the 36 decans or gods were added together (i.e., 1+2+3+4 etc.1-36) the total numerical value of the pagan zodiac added up to 666. This number therefore became the sublime number of solar worship in the pagan world. This is why, for example, the theatre built by Scaurus in Greece was surrounded by 36 columns. It is also the reason why the Moslem Temple at Mecca and the Temple at Ionia in Scotland are also surrounded by exactly 360 columns.

Throughout the Bible the number 9, (especially when connected to number 6), is consistently associated with finality and JUDGMENT. For example, it was in the 9th year of king Zedekiah's wicked reign that God raised up Nebuchadnezzar king of Babylon (now Iraq) to besiege Jerusalem and burn the temple, because Israel had so terribly sinned, feared other gods and walked in the statutes of the heathen, which led to king Zedekiah's sons being slain before his very eyes, then his own eyes were cruelly put out. It was also on the 9th day of the fourth month that the terrible famine in Jerusalem prevailed (2 Kings 25:1-3). It was in the 9th year of king Hoshea's wicked reign also that the king of Assyria took Samaria and carried Israel away. (2 Kings 17:6). Could this happen to Israel once again? Could it happen to the apostate Christian Church as well? Could it happen to the entire world? For today, in many respects, our nation's sins are very much worse.

According to Bible chronology, depending on whether one uses Christ's birth or crucifixion dates as way-points, from the creation of Adam to Christ is approximately 4,000 years, Christ to the end of the "times of the Gentiles" and the time of the implementation of the global "666 mark of the beast" system for all buying and selling foretold in Revelation 13:18, is 2000 years making up a total period of 6,000 years. There is conjecture amongst Biblical chronologists when exactly this 6000th year will actually be, some say it will be in 2018/2019, but whenever the precise date actually is, all genuine Christian agree it is getting very close indeed. The arrival of this 6,000th year signifies a period of great tribulation and judgment and is closely linked to the prophecies in Revelation 13, and takes place before the completion of Ezekiel's prophesied millennium temple in Jerusalem, the start of the 7th millennium reign of Christ. Thus, the number 6,000 years divided by 9 = 666.666.666.

If one looks at the specific "frequency range" of damaging BLUE LIGHT in the above table of the visible light spectrum, it is interesting to note that the 666 trillionth wave cycle of light is *hidden* in the BLUE LIGHT band (that all LEDs emit), which, if not stopped, are soon going to curse the whole world with blindness. This is precisely happening as the world approaches the end this 6th millennium period with its epoch in the year 6,000 very soon, and it's coming with a curse, as previously happened to Israel and wicked king Zedekiah for his rebellion in turning away from the Lord!

In the Scriptures, the terms, "*I beheld Satan as lightning fall from heaven*" in Luke 10:18, and "*And no marvel; for Satan himself is transformed into an angel of light*" in 2 Corinthians 11:14 – all take on an entirely new context with LED lighting as we shall soon see in the following chapters.

Why the sky is blue

Part of the intense radiation from the sun is filtered by the Van Allen radiation belts. However, a lot of it passes on through to the earth's atmosphere to be filtered again before it gets to earth. Sunlight is made up of the colours of the rainbow: **red, orange, yellow green, blue, indigo** and **violet**. When the sun's radiation strikes the gas molecules in the atmosphere, the atmosphere further interacts with the sunlight filtering it before it reaches our eyes. In reality, the earth's atmosphere is a giant filter and solar shield.

When the sun's rays strike the atmosphere, the gas molecules in it scatter the higher energy (high frequency**) blue** and **UV** portions of the sunlight more than they scatter the lower energy **red** portion of the sunlight (called Rayleigh scattering, named after the physicist Lord John Rayleigh). Because the gas molecules are smaller than the wavelength of visible light, depending on the wavelength band of the light, each wave length acts differently when it strikes the molecules. Most of the longer wavelengths with the lowest frequency and energy (red, orange, yellow and green) are allowed to pass straight through. However, when the shorter UV and blue wave lengths bump into the molecules, because they are "oscillating" (similar to the way thinner strings emit higher notes or sound waves "vibrating" from a guitar) at a much faster rate (even though they have higher frequency and energy) much of the light gets absorbed by the gas molecules and the molecules radiate the colour that was absorbed in different directions. Hence, this is the reason why the sky is blue.

The human eye cannot see the UV band that is filtered in the Van Allen Radiation Belt or in the gas molecules in the atmosphere, but it can see the blue light band (next to it) in the sky that has been largely absorbed, filtered and scattered. The reason why the sky is a deeper blue directly overhead and why it gradually becomes much paler in colour towards the horizon is that the scattered blue light must pass through more air to reach your eyes as you look closer to the horizon.

Too much UV or blue light is extremely damaging to animal and plant life on earth, just as too little has the same effect. The atmosphere is meticulously created and finely tuned to allow just the precise amount of light to safely pass through to us here on earth to keep everything healthy. While not generally recognised, light has a greater effect on human health than even diet or exercise.

Comparison of the spectra of sunlight with the 3 most widely used types of lamps

Natural daylight in summer at noon: As most people know, the damaging UV – blue light index is at its very highest in summer at around mid-day where it can give people extreme sunburn if care is not taken. Lighting manufacturers can produce UV light bulbs to simulate this and these are used in tanning clinics etc., not to be recommended.

At this time of the year in the middle of the day there is a very smooth spectrum of light, with much more UV – blue light than the red, orange and yellow bands. But as the sun moves across the sky towards sunset the proportions change dramatically. It is well known this rapidly changing intensity of UV and blue light acts a 'body clock' regulator in the life of all plants and animals.

Natural daylight in summer when the sun is setting: In summer, around the time the sun is setting, there still is also a very smooth spectrum of light however, the damaging UV-blue index in the natural daylight spectrum at midday has reversed and has almost disappeared, while the predominant radiation is now from the red, orange and yellow bands. As the blue light diminishes towards sunset, it 'gets many animals such as birds ready for bed' while it brings out many others to play. So how does artificial light compare?

1) Spectrum of incandescent filament light bulbs: This spectrum is quite remarkably, almost identical to the SMOOTH daylight spectrum near when the sun is setting on a summer's day. The light spectrum produced by standard incandescent light bulbs (including halogens, which are still a type of incandescent too) is the closest to natural daylight by far.

2) Spectrum of fluorescent lamps and tubes: These light sources produce an extremely 'UNEVEN' spectrum of light, high in UV – blue light between 400nm – 500nm. While nowhere near as bad as white LED light, this light source is vastly inferior to ordinary incandescent light bulbs, (including halogens).

3) Spectrum of all white LEDs: All white LEDs have a smoother spectral curve than fluorescent lamps, but they have a highly damaging, intense, sharp spike at the blue end of the spectrum unlike both fluorescent lamps and incandescent lamps.

On top of this, the small size of LEDs causes high retinal irradiance (glare) in the specific wavelength which has proven to be the most damaging in experimental studies on cell cultures and various animal species' eyes. Numerous epidemiological studies have already conclusively demonstrated that excessive shortwave (blue) light exposure is especially toxic to the retina and is responsible for *age-related macular degeneration (ARMG)* leading to blindness, and many other diseases of the eyes.

Excellent spectral graphs showing a comparison between the spectra of the sun with the 3 most common and widely used electrical lamp types may be seen here:
http://users.skynet.be/fc298377/EN_skin_eye.htm
http://www.olympusmicro.com/primer/lightandcolor/lightsourcesintro.html

Graphs of white LED blue light spectral curves

Excellent graphs showing the blue light spectral curves of white LEDs are here:
http://en.wikipedia.org/wiki/Light-emitting_diode
http://texyt.com/bright+blue+leds+annoyance+health+risks

So why, precisely, are all incandescent light bulbs (that produce the closest artificial spectral emissions to natural daylight, (by far the best for human health) now gradually being banned? – when at the same time, the whole world is being forced to convert to LEDs, OLEDs and LDs which in the future are going to severely saturate everybody's eyes with damaging blue-light emissions and gradually curse the world with blindness? Why?

CHAPTER EIGHT

BLUE LIGHT TOXICITY OF LEDS: GLOBAL LIGHTING ASSOCIATION LIARS

As previously mentioned in much greater detail, the *Global Lighting Association (GLA)* is a massive 'cartel' now made up of over 5000 giant, multinational 'Mafia' lighting manufacturing companies, with huge numbers of people employed, encompassing millions of wealthy businessmen, scientists, doctors and engineers, worth trillions of dollars – that dominates the lighting policies of the world – controlling many governments as well. This organization represents ALL major lighting manufacturers around the world. So what do they OFFICIALLY all have to say about the BLUE LIGHT TOXICITY OF LEDS?

The following information is taken from their own website:

www.globallightingassociation.org/

Go to their home page and click on '*Library*.' Within this site are PDF files of *GLA Papers & Publications* which include: (1) **Optical Safety of LEDs [abridged version]** and (2) **Optical Safety of LEDs [long paper].** These publications clearly include their official position on the optical safety of LEDs including blue light toxicity. Readers who are interested in saving this information (which is highly incriminating) for personal reasons, potential lawsuits, or whatever are advised to download and save these files immediately as these files will likely go "missing" following the publication of this book or others like it.

The author in the following will quote from the 22-page ***[long paper]*** entitled in full, ***Optical and Photobiological Safety of LED, CFLs and Other High Efficiency General Lighting Sources – A White Paper of the Global Lighting Association March 2012:***

In the paper's introduction on page 2 the authors say:

- "**Global Lighting Association**

The Global Lighting Association (GLA) is a grouping of peak national and regional lighting associations. This paper is one of a series of White Papers and policy documents produced by the GLA on lighting issues of interest to the lighting industry, to lighting industry stakeholders and to consumers. For more information on the GLA and its activities see www.globallightingassociation.org

Executive Summary

With the phasing-out of incandescent lamps in many countries, the introduction of new LED based light sources and luminaires sometimes raises the question of whether the spectral characteristics of the LED and other energy saving fluorescent lamps (such as CFLs) are suitable to replace traditional incandescent lamps. These concerns are sometimes raised particularly for radiation emissions in the UV and blue parts of the spectrum. This document will address such concerns for common 'white light' sources typically used in households and other general lighting use.

LED and CFL lamps, as well as other general use lighting products produced which meet applicable optical safety requirements, are safe to use by the vast majority of consumers in

general lighting applications. A small portion of the population has an enhanced sensitivity to UV. These individuals may want to consider using LED based lighting for their high efficiency lighting needs if there are any concerns about even the small levels of UV that are produced by CFLs. (Another option for such UV sensitive individuals is to use a covered CFL or ensure the CFL is in a covered luminaire.)

While GLA members have made every attempt to ensure the accuracy of the information contained herein, it does not accept responsibility or liability for any usage of this information."

Although their entire white paper on the optical safety of LEDs is impressively written with numerous charts, colourful graphs and complex technical information in it attempting to prove LEDs are perfectly harmless, there is not a single reference to any published material or name of any person, scientist, doctor engineer or professional author in it. Remember, this document is the final, authoritative, published, OFFICIAL POSITION STATEMENT on the "optical safety of LED lighting" by all these global lighting manufacturers for the entire world!

And yet, not a single person has even had the courage to put his or her name to it!

The truth is, it is a carefully drafted litany of LIES – painstakingly prepared by evil, corporate doctors and scientists to cover-up the real dangers of LEDs. They are well informed in their field and they KNOW what they are deceptively doing.

They continue on page 6, **"Conclusions on blue light emission"**

"**LEDs compared to other light sources**

Since LEDs are the newest lighting technology, and since earlier products tended to have bluer (cooler) color temperatures, some have mistakenly concluded this technology has an inherent 'blue light issue'.

With regard to photobiological safety, LEDs are not fundamentally different to lamps using traditional technologies, such as incandescent or fluorescent (including CFL) lamps.

The portion of blue light produced by typical LEDs is not higher than the portion of blue light in lamps using other technologies at the same color temperature (see figure 2 in annex 3 with the blue hazard irradiance values E_B of a wide range of products with comparable Color Temperature). If LED or CFL retrofit products are observed in comparison to the products which they are intended to replace (e.g. LED MR16 vs. Halogen MR16, or a LED retrofit with screw base vs. frosted incandescent lamp), the risk ratings are similar…"

The above underlined statements are simply not true and are barefaced lies.

Perhaps their greatest wickedness and deception is on page 7. This author doesn't use the term 'wickedness' lightly. The doctors, eye specialists and scientists who have clearly written this spurious material plainly know the damaging affect that blue light has on children's eyes, but for the sake of lining their pockets with filthy lucre or to keep their jobs – they have chosen to deliberately lie in support of LEDs, while at the same time they are sentencing all children potentially with blindness later in life.

One can speculate that most of these highly immoral, professional liars probably feel they will all be dead and gone by the time young children now experience serious eye diseases or blindness later in life. "So why should I care" seems to be the prevalent attitude. They continue,

- **"Energy efficient lighting and children**

The lens of a child's eye filters blue light less efficiently than an adult's lens. Children are thus more sensitive to blue light hazard. However, it is not necessary that LEDs and CFLs (or blue light in general) should be avoided in an environment with children present, since general illumination products used in homes, offices, stores, and schools do not produce intense levels of blue light. Since such applications have a low surface brightness (intensity) even "pure" blue light is completely harmless, regardless of whether it is the blue produced by LEDs, CFLs or other common residential light sources, or the blue light found in sky light. (By way of a very simple example, the blue light from a blue LED holiday string is no more hazardous than the blue light produced by its less efficient blue incandescent holiday string.)"

These underlined statements above are simply not true, and they know it. The fact is, children's eyes are profoundly affected by excessive amounts of UV or blue light (which the author will cover in a following chapter). To wildly claim that "pure blue light is completely harmless" like this is simply outrageous when most specialists in the field know perfectly well this is not true. They continue;

"Guidance for people with high sensitivity for blue light

The above statements are also valid for healthy people in the general public. However, people who have been *medically diagnosed* with highly sensitive skin or eyes for blue light may be wise to investigate alternative light sources that operate on a more specific radiation band not covered by the applied action curves that cover a broad range of radiations. *As with any medical condition, people with blue light sensitivity (such as lupus) should consult their health care provider for special guidance."*

Surely, not only people who have been "medically diagnosed" with blue light sensitivity will be affected by excessive quantities of blue light? They continue;

"The biological importance of blue light

Blue light exposure is important to human beings. Blue light with a peak around 460-480nm regulates the biological clock, alertness and metabolic processes. GLA members have established a special working group to translate these findings into practical application norms and standards. In natural conditions, outdoor daylight fulfils the function of synchronizing the biological clock (called the circadian cycle). Yet, in today's society, many people spend most of the day indoors (offices, schools, retail space, etc.) and may lack the blue light exposure that was common in the past. Blue and cool white light sources can be used to create lighting conditions such that people will receive their daily portion of blue light to keep their physiology in tune with the natural day-night rhythm."

Blue light does have a huge biological importance, but not in the specific concentrations and form that all white LEDs provide. In the following the author will show exactly why.

While writing this book, a number of the author's colleagues have put forward the pertinent question; "If LEDs are so dangerous and may cause blindness later in life, then why do so many eminent, financially successful, professional men and women consistently lie so much about the potential adverse reactions from them? Surely they all can't be that immoral? Most of these people have families as well you know!"

Answer: Well, it depends on whether you believe men are innately evil or innately good. Jeremiah said, "*The heart is deceitful above all things, and desperately wicked: who can know it?"* (Jeremiah 17:9). Paul said to Timothy, *"But they that will be rich fall into*

temptation and a snare, and into many foolish and hurtful lusts, which drown men in destruction and perdition. ***For the love of money is the root of all evil…"*** (I Timothy 6:9-10). And as the old man next door says, "Hey man, just follow the money, just follow the money – and there you have your culprit!"

ANTI-BLUE LIGHT SCREEN PROTECTORS: (To be a good liar you must have a good memory)

Have you heard the old saying? "To be a good liar you have to have a good memory."

Well it turns out the millions of business executives, doctors, ophthalmologists, lighting engineers and scientists who have all given their unreserved approval of the above GLA official "Position Paper" on the Optical Safety of LEDS have forgotten that there are, at the very same time they are denying LEDs have a serious blue light hazard problem – numerous companies in Germany, China and the US that now specialize in manufacturing **"Anti-blue light LED screen protectors!**

So we may quietly ask, "Why?" – if there [supposedly] is no identifiable blue light hazard being emitted from LEDs, should one ever want to manufacture "protectors" against it – if such a hazard does not exist in the first place?

CHAPTER NINE

HOW LEDS ARE MADE AND WORK

This information about LEDs is current as at July 2014. Technology is continuously changing rapidly and it is important to acknowledge that in the future there may be new discoveries making the current technologies redundant, much better or worse. Improved products may come on the market that do not emit dangerous levels of blue light as presently exists. But up to the present time, all white LEDs emit dangerous levels of blue light.

Fluorescent tubes and lamps

When fluorescence was first discovered by Irish scientist Sir George Stokes, British scientists Michael Faraday and James Clark in the early – mid 1800s, it wasn't until the end of the 1920s – early 1930s that the technology was first commercialized using mercury vapour to emit ultraviolet light passed through a tube coated with phosphor to produce visible white light. Even back then mercury was known to be highly toxic for human health. From that time it was hoped that the dangerous mercury and UV emission problems from this technology could have been resolved by science. **Yet nearly 100 years later, to date, there has been no new discovery that would allow these lamps (including CFLs) to be manufactured at a commercially viable price without using mercury while emitting UV.**

Indeed, the Global Lighting Association has published a paper confirming this which can be downloaded or read on their website: http://wwwgloballightingassociation.org/library Go to 'Library' and view the PDF titled, *Response to Proposal from the UNEP for a Legally-binding Instrument on Mercury*. In this proposal the GLA writes;

- **"No effective substitute for mercury in most energy efficient lamps**

There are no alternatives that are technologically and economically feasible for replacing mercury in lamps that currently rely on the substance for their operation. Mercury is essential for the efficient operation of these lamps. All other lighting technologies either struggle to match the energy efficiency of mercury-containing lamps, or fall well short… Also for most special purpose lamps no alternatives to mercury are available… etc."

However, mercury is not the only danger with fluorescent lighting products and CFLs – UV is equally damaging, if not more so.

SBU Study reveals harmful effects of CFL bulbs to skin

On July 18 2012, Stony Brook University in New York published an article about a study in which a team of Stony Brook researchers looked into the potential impact of healthy human skin tissue (in vitro) being exposed to ultraviolet rays emitted from compact fluorescent light (CFL) bulbs. The results, *The Effects of UV Emission from CFL Exposure on Human Dermal Fibroblasts and Keratinocytes in Vitro,* were published in the June 2012 issue of the *Journal of Photochemistry and Photobiology*.

http://commcgi.cc.stonybrook.edu/am2/publish/General_University_News_2/SBU_Study_Reveals_Harmful_effects_of_CFL_Bulbs_to_Skin.shtml

Results revealed significant levels of UVC and UVA, which appeared to originate from cracks in the phosphor coatings, present in all CFL bulbs studied. At Stony Brook's Advanced Energy Research and Technology center (AERTC), the team took the same bulbs and studied the

effects of exposure on healthy human skin tissue cells, including: fibroblasts, a type of cell found in connective tissue that produces collagen; and keratinocytes, an epidermal cell that produces keratin, the key structural material in the outer layer of human skin. Tests were repeated with incandescent light-bulbs of the same intensity and with the introduction of Titanium Dioxide (TiO2) nanoparticles, which are found in personal care products normally used for UV absorption.

“Our study revealed that the response of healthy skin cells to UV emitted from CFL bulbs is consistent with damage from ultraviolet radiation,” said Professor Rafailovich. “Skin cell damage was further enhanced when low dosages of TiO2 nanoparticles were introduced to the skin cells prior to exposure.” Rafailovich added that incandescent light of the same intensity had no effect on healthy skin cells, with or without the presence of TiO2.

“Despite their large energy savings, consumers should be careful when using compact fluorescent light-bulbs,” said Professor Rafailovich. “Our research shows that it is best to avoid using them at close distances and that they are safest when placed behind an additional glass cover.”

The research, funded by the National Science Foundation, was a collaboration of Stony Brook University and New York State Stem Cell Science (NYSTEM). Co-authors of the study include: Dr Rafailovich; Dr Tatsiana Mironava, Adjunct Faculty, Department of Chemical and Molecular Engineering, Stony Brook University and Senior Research Support Specialist, NYSTEM; Dr Michael Hadjiargyrou, Professor, Department of Biomedical Engineering, Stony Brook University; and Dr Marcia Simon, Professor, Department of Oral Biology and Pathology, Stony Brook School of Dental Medicine and the Director of the Living Skin Bank at Stony Brook.”

Of course, the Global Lighting Association member companies all claim that CFLs don’t produce a hazardous amount of UV radiation, and that UV is far less than the amount produced by natural daylight. The truth is that all compact fluorescent light-bulbs contain mercury vapour. Once the vapour is hit with an electric current, it emits a great number of UV rays. UV rays are theoretically absorbed by the layer of phosphor that coats the bulbs (and tubes also) but the signature twisted spiral shape makes these bulbs more prone to cracks in the phosphor, which dramatically increases UV/mercury exposure. Researchers found cracks in almost all bulbs purchased from retail stores, indicating it is a standard design flaw in these bulbs.

CFL bulbs contain other cancer-causing chemicals as well. German scientists found that several different chemicals and toxins were released when CFLs are turned on, including naphthalene (which has been linked to cancer in animals) and styrene (which has been declared “a likely human carcinogen”).

Whether this experience with mercury and UV in fluorescent lighting products will be replicated with LEDs is yet to be fully seen. However, a ‘massive polar shift’ in technology in manufacturing LEDs will have to take place before any vast reduction in blue light hazard is ever removed.

The author is not suggesting this massive problem will not ever be overcome as there already are yellow filtering products on the market, spectacles, goggles and screens available that can filter or block out the blue light hazard. But it is not an easy hurdle to overcome because such products are often expensive, inconvenient to use, and when applied as a filter often degrade the colour quality or intensity of the light.

Light-emitting diodes (LEDs) – how they are made

Electroluminescence was first discovered by British scientist H.J. Round at Marconi Laboratories in 1907. The Russian Oleg Losev created the first true LED in 1927. The first visible-spectrum red LED was created in 1962 by Nick Holonyak Jr. at General Electric. In 1968 the Monsanto Company was the first corporation to mass-produce visible LEDs using gallium arsenide phosphide (GaAsP) for indicator lamps. The first-high brightness LEDs were developed by Shuji Nakamura of Nichia Corporation in 1994. Nakamura also developed the first high brightness white LED for which it was awarded the 2006 Millennium Technology Prize for its invention.

An LED consists of a chip of semiconducting material doped with impurities to create a *p-n junction*. Current flows freely from the p-side, or anode, to the n-side, or cathode, but not in the reverse direction. Charge-carriers, electrons and holes, flow into the junction from electrodes with different voltages. When an electron meets a hole, it descends into a lower energy level and releases energy in the form of a photon. The wavelength of the light emitted, and hence its colour, depends on the band gap energy of the materials used to form the *p-n junction*.

High brightness LEDs can provide colours across the entire visible light spectrum. Both AlInGap and InGaN material systems are used to produce high-brightness LEDs. Aluminium, indium, gallium, and phosphide compounds are used to produce red, orange, yellow and green colours, while indium and gallium-nitride compounds are used for ultraviolet, blue, blue-green and true-green colours.

White LEDs: how they are made

While LEDs are currently being manufactured in a huge variety of shapes, sizes, colours, intensities, and designs, including newer Organic light-emitting diodes (OLEDs) and Quantum dot LEDs (QDs) – so far, there are generally only two primary ways of manufacturing white light-emitting diodes (WLEDs) that emit high intensity white light efficiently.

1) **RGB System:** The first system involves using individual LEDs that emit three individual primary colours: **red, green** and **blue** which are "mixed" together forming a white light. This is called the Red, Green, Blue, (RGB) System. In physics, you can't mix colours together. However, in biology you can do it and the phenomenon (illusion) created by mixing these colours together to the human eye is seen as white light.

There is an excellent 5-minute video on YouTube demonstrating this remarkable phenomenon. http://www.youtube.com/watch?v=iPPYGJjKVco

This first method of 'combining multiple monochromatic LEDs' provides the option of tuning the colour to warm white or cool white, without the need to coat a lens with phosphor (the second method) which achieves the same effect, but substantially cuts down the amount of light emitted. The RGB method produces exceptionally high brightness LED light efficiency but the colour control is a challenge, because even a couple of percent change in the output of the red LED in an RGB system can produce observable colour changes. As different coloured LEDs can degrade at different rates, this can produce a marked colour change over time.

2) **Phosphor Conversion:** The second method is to simply use a phosphor coating to convert monochromatic light from a blue or UV LED to broad-spectrum white light, much in the same way a fluorescent tube or lamp works. This method using a phosphor coating introduces a heat/light loss because of what is called the *Stokes shift*, together with other phosphor-related degradation issues, so that higher efficiency cannot be achieved as by combining multiple LEDs. Due to the cost and simplicity of manufacturing these phosphor based LEDs, however, this method is often still the most popular method for making high-intensity white LEDs.

3) **Blue Light Emissions:** Because the RGB system mixes red, green and **blue** LEDs together (recognised by the human eye as white), and the Phosphor Conversion system predominantly converts monochromatic light from **blue** or **UV** LEDs to white light – these forms of white LEDs emit a powerful "spike" of damaging blue light in both of their spectrums. Because of the physics involved in mixing these limited amounts of colours in the visible light spectrum to produce "white light" from LEDs to suit the biological composition of the human eye, it is therefore extremely difficult to overcome this intense blue light hazard.

Claimed advantages of LEDs

1. Carbon emissions and electricity savings: LEDs deliver significant reductions in carbon emissions. According to the International Energy Agency (IEA), approximately 3% of global oil demand can be attributed to lighting. Electricity for lighting accounts for almost 20% of electricity consumption and 6% of CO2 emissions worldwide. According to the U.S. Department of Energy, as at July 2012; "By 2027, LED lighting was [supposedly] expected to save about 348 TWh of electricity (compared to no LED lighting) in the U.S. This is the equivalent annual electrical output of 44 large electric power plants (1000 megawatts each), with a total economic saving of more than $30 billion at today's electricity prices." http://energy.gov/energysaver/articles/led-lighting

2. Efficiency: LEDs emit more lumens per watt than any other light bulb. The efficacy of LEDs can be greater than 100 lumens per watt (LPW) and it is continuing to increase.

3. Size: LEDs can be very small and are good for indicator light panels.

4. Coolness: Compared to most other light sources LEDs generate very little heat.

5. Fire Risk: Because LEDs run cooler than most other light sources they constitute a lower fire risk.

6. Dimming: LEDs can be dimmed.

7. Lifespan: LEDs have a long lifespan 25,000 – 50,000 hours, compared to fluorescent lamps at 5,000 –12,000 hours, and incandescent light-bulbs at 1000 – 2000 hours.

8. Shock Resistance: LEDs are relatively shock resistant compared to fluorescent and incandescent bulbs.

9. Focus: LEDs focus the light more than fluorescent and incandescent sources that require a reflector.

10. UV Emissions: No UV emissions.

11. IR Emissions: No Infrared emissions

True disadvantages of LEDs

1. Blue light emissions: If white LEDs are not abolished, radically modified or substantially filtered of their blue light hazard in the near future – they are gradually going to curse the whole world with blindness (and other illnesses). There is a considerable amount of evidence and research that shows blue LED light can and does irreparably

damage the cells in the eye's retina. All LED products, not only 'white' LEDs, produce very high levels of damaging blue light emissions – including LED TVs, computer screens, iPhones, iPads, tablets and car headlights.

2. Degradation: The claim that white LEDs last 25 times longer or more than ordinary incandescent light bulbs (including halogens) is a misnomer. From the first day a LED light bulb is switched on its brightness is beginning to rapidly decline through a process called "degradation." Semiconductors have what is called an "electrical half-life," or a maximum amount of electrical power they can transfer before they rapidly dim down to less than half their original brightness. Some cheaper LEDs can dim down to less than half their original brightness within 3 months of continuous use. They don't burn out abruptly like incandescent light-bulbs, they just dim out quietly and imperceptibly, in most cases at first without most people ever realizing it. So the 25 times longer life span claimed by manufacturers is a deliberate lie, misrepresentation and a mockery.

3. Power surges: LEDs are extremely prone to burnout from electrical power surges, as the individual semiconductors are very sensitive to voltage fluctuations. While a relatively small power surge caused by a distant lightning strike would be relatively harmless to power supplies, regulators, protection circuits in most home appliances including CFLs and fluorescent lamps utilizing a regulated solid state inverter – LEDs, on the other hand can be easily burned out, dimmed or reduced to a random flicker from just one surge.

4. Efficiency droop: The luminous efficacy of LEDs markedly decreases as the electrical current increases. As electrical current increases, heating also increases and this compromises the lifetime of the products, even with heat sinks.

5. **Light distribution:** Single LEDs cannot provide a wide spherical light field of distribution like CFLs, regular incandescent lamps or halogen bulbs.

6. **Price:** LEDs are much more expensive, both in capital cost and price per lumen, than traditional bulbs.

7. **Light quality:** LEDs produce the worst light spectrum profile of any type of light-bulb ever produced. Unlike incandescent light bulbs including halogens that closely resemble natural daylight and are relatively soothing to the human eye, LEDs, because of their uneven spectral curve and sharp blue light spike, even in ambient light, artificially place the human eye under constant retinal stress.

8. **UV Emissions:** Lighting manufacturers say there are no UV emissions from LEDs. A number of other independent researchers dispute this and say this is entirely incorrect as they do.

9. **IR Emissions:** Lighting manufacturers say there are no IR emissions from LEDs. A number of other independent researchers dispute this and say this is entirely incorrect as they do.

N.B. Lumens versus watts: Lamps used now for lighting are commonly labelled with their light output in "lumens" (total amount of light output from a light emitter), and in many countries this is now required by law. This law was introduced into the EU on September I, 2010 replacing watts (the unit of power consumed). A 100-watt incandescent light-bulb produces about 1700-1800 lumens. A 60-watt incandescent light-bulb produces 750-800 lumens. Most incandescent light-bulbs produce about 12-17-lumens per watt. A typical 12-watt LED produces about 850-1000 lumens, or 70-80-lumens per watt.

CHAPTER TEN

EYE BIOLOGY:
WHY LEDS ARE GOING TO CAUSE BLINDNESS

One of the best and most outstanding, independent websites in the world at present dealing with lighting issues, light bulbs and exposing the inherent dangers of LEDs (with references) is that run by Rik Gheysens: http://users.skynet.be/fc298377/EN_EU.htm contact: rikgheysens@hotmail.com His top-class website contains many good references.

Over just the last 2 or 3 years or so, a literal 'LED arms race' has taken the world by storm in a giant battle for the consumer market dazzling millions of unwary customers with a powerful shower of damaging, intense blue light. This massive spike of unnatural blue light is emitted from all blue/white LED products irrespective of what they are or what they outwardly look like. It includes all white LEDs, LED indicator lights, computer screens, TVs, iPhones, iPads, tablets and car headlights.

Manufacturers, through manipulating governments, want to ban all incandescent and fluorescent products and transfer the whole to LEDs by 2020. The Global Lighting Association that represents the world's over 5000 giant multinational lighting companies, with their millions of executives, scientists and doctors, all deceptively claim LEDs are perfectly safe and emit no more damaging blue light than other forms of lighting products. As previously explained, this is a blatant lie. All blue/white LEDs emit a massive spike of blue light in the visible light spectrum which is extremely sharp and damaging to the retina of the human eye.

Millions of books have been written about how food nutrition affects general health. But relatively few have ever been penned about how light affects human health. Yet the truth is, light *profoundly* affects human health, in many ways even more than the food we eat. Perhaps the reason why so few books, relatively speaking, have been written about light in this respect is that it is often difficult to see, measure and quantify the results because usually its affect happens only very gradually over a very long period of time.

Macular degeneration

It is this long-term, gradual BLUE LIGHT damage to eyesight by LEDs which makes them so incredibly insidious.

Honest, independent, eye doctors, ophthalmologists and optical scientists already know that blue light toxicity (long before the massive influx of LEDs were ever introduced) is involved in Age-related Macular Degeneration (AMD or ARMD).

Macular degeneration is a major cause of blindness and visual impairment in older adults. It is a medical condition that more often than not affects older people (50-plus) and results in a permanent loss of vision in the centre of the visual field (macula) because of damage to the retina.

Often macular degeneration can make it difficult, if not impossible, to read or recognise faces or other similar objects, although sufficient peripheral vision sometimes remains to

allow other activities in normal daily life. Although macular degeneration (sometimes called macular dystrophy) can affect younger people, the term generally refers the AMD or ARMD in older people – up till now!

Because all LEDs, including white LEDs, emit a powerful spike of damaging, unnatural, intense blue light, this author predicts that depending on type and length of exposure, everyone who exposes themselves to high concentrations of this blue light hazard are going to develop PREMATURE MACULAR DEGENERATION in the future. No exceptions!

Most optical scientists and doctors who understand the close link between LED blue light toxicity and retinal damage to the eye usually diplomatically say, blue light exposure "may" cause macular degeneration in the future because only time will tell how minor or excessive this "may" prove to be. How long this will take is open to conjecture, they say, because laboratory tests struggle to simulate decades of blue light exposure over a long period of time.

So in this sense, they are correct, and we cannot say *precisely* at 50 years of age, for example, everyone will get AMD or go blind. But one thing is absolutely sure, it is quickly coming. Furthermore, when the damage is occurring the victim won't even notice it. It is painless, cumulative and irreversible. The only way a victim will ever know he or she has damaged her retina is when a dysfunction in vision slowly arises and then it will be too late.

But let's not deceive ourselves into believing the lie from the light manufacturers that the blue light hazard is absolutely harmless. The truth is that the massive increase in blue light spike from LEDs around the world is going to have a profound effect on human eyesight, general physical and mental health.

Already there is a huge body of evidence pointing to this fact that severe retinal damage by blue light toxicity emitted from LEDs is happening now. So it's not merely a question of if it "may" occur in the future, but "when."

Children and white eyes

In the shorter term, children mainly under 10-12 years of age will be most affected by blue light from LEDs, because they have what ophthalmologists call "white eyes" which have not yet "yellowed" and fully matured, which are extremely susceptible to irreversible damage from UV and blue light hazard.

On 19 October 2010, the French Agency for Food, Environmental and Occupational Health & Safety published a report, *Health Effects of Lighting Systems using Light-emitting diodes (LEDs)* noting; "Special attention should be given to children because of the transparency of their crystalline lens and both aphakics (with no crystalline lens) and pseudophakics (with artificial crystalline lenses) who consequently either cannot or can only insufficiently filter short wavelengths (especially blue light); (ANSES-report 2010, p.73-74) in young people (before age 10), the lens passes virtually all blue light (80%) especially waves between 430 and 440nm, the most dangerous to the retina.

With age, the lens becomes yellow and absorbs shorter wavelengths. This change in age-dependent transmission protects the retina from the blue light and reduces scotopic vision (vision at night) significantly (about 33% at 50 years compared to 5 years). At the age of 50, protection against UVA, UVB and blue light grew 80%."

SCENIHR, *Health Effects of Artificial Light*, March 19, 2012, gives the following figures:

http://users.skynet.be/fc298377/EN_skin_eye.htm

Wavelength:	Age < 9 years	Age 10 years	Age 60-70 years
	Reaches the retina	Reaches the retina	Reaches the retina
320 nm	2% to 5%	No UV	No UV
I…….(410-460 nm blue light radiation)……I			
400 nm	15%	15%	1%
460 nm	65%	60%	40%

"In adults, the crystalline lens (which, as it turns yellow, partly absorbs blue radiation) and the macular pigments partially protect against the toxicity through their capacity to absorb blue light. These protective mechanisms are weaker in children (whose crystalline lenses are transparent)… There is also less protection available in cases of reduced macular pigment, as observed during certain macular pathologies (e.g. ARMD). ANSES-Report 2010, p.127: The car LED headlight may cause retinal damage in young children who find themselves on the same height as the emitting source."

Today many young children are just plonked in front of LED TVS to keep them entertained literally frying their eyes with damaging blue light. According to an article in the *MailOnline* 30 October 2013, titled, *The five signs your child is addicted to their iPad – and how to give them a 'digital detox':*

- "One in three children are using tablets and phones before they can talk
- The rise in gadgets is being attributed to the rise in technology addiction
- Addiction in children can interfere with their sleeping patterns and eating
- Signs include withdrawal symptoms and a rise in devious behaviour
- Experts explain how to impose a 'digital detox' if a parent is concerned
- Tablets and phones have replaced the TV as a way of pacifying children and keeping them entertained."

Many children are now so addicted to their iPads or iPhones they actually take the devices to bed with them. Virtually all of these devices now have bright LED screens, and many children often view them from very short distances.

Children don't look at them they glare INTO them! Can you imagine what the blue light radiation from these screens is doing to their young, hyper-sensitive "white eyes?" – let alone suppressing their melatonin levels causing the growing epidemic of insomnia, diabetes and many other health problems that are increasingly being associated with low melatonin.

In fact, all around the world at present a rapidly growing epidemic of insomnia is developing, not only in children but adults as well.

According to a recent article in the *Express (UK)* titled, *Turn to Sleep Mode: Smartphones are blamed for epidemic of insomnia – "*almost 80 per cent of us now use a smartphone or tablet computer in the two hours before we go to sleep. Among those aged 18-24 the figure rises to 91 per cent. Professor Richard Wiseman, a psychologist at the University of Hertfordshire, said: "The blue light from these devices suppresses the production of the sleep-inducing hormone melatonin, so it's important to avoid them before bedtime." More than 28 million people in the UK – almost six out of 10 – say they regularly get no more than seven hours sleep a night."

A little bit of eye biology

The human eye is a miracle of biological engineering having to cope with a huge variation in light levels and spectra before it transmits the images it receives to the brain. The eye has a lens at the front of it which focuses light onto the retina at the back of the eyeball. The retina is a very thin, multi-layered tissue at the back of the eye where the light is received by photoreceptor cells called rods (responsible for peripheral and dim light vision) and cones (providing central, bright light, fine detail, and colour vision). The photoreceptors convert light into nerve impulses, which are then processed by the retina and sent through nerve fibres (optic nerve) to the brain.

In the dimmest light, rods detect moving objects and images. There is only one type of rod, so no colour vision is available in dim light. Left in the dark, rods and connecting nerves become more sensitive, taking around 30 minutes to reach maximum, although much of the gain occurs in the first few minutes. Conversely, all additional sensitivity can be lost in seconds – so night vision which took minutes to gain is ruined if someone flashes a torch or car headlight in your eyes.

Peak rod sensitivity is around 498nm, extending between 400 and 600nm. By 640nm there is no response, which is why instrument panels on some aircraft and cars have deep red backlighting. Red cones allow instruments to be seen clearly, at a wavelength that cannot ruin night vision for forward viewing. Blue or green backlighting is inferior because this light ruins night vision.

As light gets brighter, rods saturate, then a second group of retinal sensors called cones take over. Cones are 100 times less sensitive than rods, and colour vision is possible because there are three types of cones. Called S, M and L, they are sensitive to blue (peak at 419-420nm), green (531-534nm), and yellow (558-564nm) respectively through three different ‘photopsin’ chemicals. L (long wavelength) cone sensitivity extends to wavelengths longer than 700nm, which is why they are frequently called ‘red’ cones. Variable mixtures of S, M and L cone response allow many colours to be distinguished in bright light.

Cones are concentrated at the centre of the back of the eye, with rods around the outside. Incoming light is controlled over a 12:1 range by the iris which varies pupil diameter from 7-2mm diameter automatically according to signals from both rods and cones.

Until recently, the rod and cone photoreceptor cells in retinas have been credited with total responsibility for light sensitivity. Recent research, however, has shown that some of the ganglion cells may be performing as a third type of photoreceptor called “intrinsically photosensitive retinal ganglion cells” (ipRGC). These sparsely situated cells are most sensitive to blue light. They seem to exist principally to help differentiate between day and night (thus modulating the ‘sleep/wake’ cycles, known as circadian rhythms). The ipRGC have been shown to independently control dilation and contraction of the pupils, with a peak response at the blue light wave length of 480nm.

Blue light hazard

The human eye is only designed to cope with a very limited amount of blue light. As we grow up the natural lens takes on a yellowish tint to provide a built-in shield to help filter out excessive amounts of blue light. The human eye is designed to see fine detail primarily with green or red light. In fact, we are poor at distinguishing sharp detail in blue, our eyes don’t really try. The most sensitive spot on the retina, the fovea centralis, has no blue light-

detecting cones at all. That's right: we're all colour blind in the most sensitive part of our eyes.

Various wavelengths of light focus differently because they refract at slightly different angles as they pass through the lens of the eye – an effect known as chromatic aberration. Because of this, blue light is not as sharply focussed on the retina as the longer wavelengths. It tends to be focused in front of the retina, so it's a little bit out of focus and scatters more widely inside the eyeball. In addition, the central area of the retina, the macula, actually filters out some blue light in an effort to sharpen our vision.

For many years military snipers and marksmen improved on this characteristic existing in our eyes by wearing yellow-tinted shooter's glasses which block out this distracting blue light. In wearing spectacles in this way they lose a little bit of colour information but have a sharper vision.

Because the photoreceptor rods, the sensitive monochromatic rod light detectors that are responsible for peripheral and dim light vision are most sensitive to greenish-blue light and they are largely located on the edge of the retina – unnatural blue light appears much brighter to us at night or indoors where ambient light is low. This phenomenon is called *Purkinje shift*. This is why, for example, even small blue LEDs can be a distraction to our peripheral vision when they're not the focus of attention.

Our eyes are not designed to handle large amounts of blue light such as that emitted by LEDs. As the result, the twin effect of fuzzy focus and light scatter makes intense blue light from a source like an LED to spread out across the retina affecting the entire visual field. When there is a strong spike of blue light, as there is from LEDs, we strain our eye muscles and squint trying to pull the blue into sharper focus.

The human eye has a strong aversion reaction to bright blue light sources, including all bluish-white light – and pupilary reflex is down in the blue part of the spectrum which signals to the muscles in the iris causing it to close. Our body's instinctive reaction is to reduce blue light entering the eye by closing down the pupil. This means that blue light not only spoils night vision, any intense blue light can cause long-term photochemical damage to the retina.

When normal bright light hits a photoreceptor, the cell bleaches and becomes useless until it has recovered through a metabolic process called the 'visual cycle.' However, in experiments with rodent models, when blue light strikes the photoreceptors it is absorbed causing a reversal of the process, when the cell becomes unbleached and responsive again to light before it is ready. This then greatly increases the potential for oxidative damage, which leads to a build-up of lipofuscin in the retinal pigment epithelium (RPE) layer. Drusen deposits are then formed from excessive amounts of lipofuscin, hindering the RPE in its ability to provide nutrients to the photoreceptors, which then wither and die. In addition, what makes matters worse, if the lipofuscin absorbs blue light in high quantities over an extended period (such as exposure to LEDs) it becomes phototoxic, which can lead to further oxidative damage to the RPE accelerating further cell death (apoptosis).

Correct proportions of blue light indeed are an important element in "natural lighting" and strongly contribute to general health. But it is now well proven that excessive amounts of artificial blue light are extremely toxic to cellular structures, test animals and human foetal retinas.

The global transformation to LED lighting is going to produce a huge increase in blue light toxicity which has a very duplicitous character indeed that needs to be closely watched. Because its damage occurs so gradually, so imperceptibly, without any pain or easily recognisable symptoms at all in its early stages for many years – most people will simply never understand or react to its dire affects before it is too late.

For these reasons, LEDs possess the amazing capacity to gradually curse the whole world with irreversible, premature macular degeneration leading to blindness. It is now not simply a question of "*if*" this may happen, but "*when*" it will happen – and D-day may be much closer than even many people who have studied the subject realistically expect.

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Click on; Artificial Lighting and the Blue Light Hazard posted in *Daily Living – the Facts About Lighting and Vision* by Dan Roberts, Founding Director, Macular Degeneration Support (originally published on MDSupport, updated October 3, 2011)

http://lowvision.preventblindness.org/daily-living-2/artificial-lighting-and-the-blue-light-hazard

Up until now, macular degeneration has largely been confined to old people. Because of this, younger and middle-aged groups generally know very little about the disease.

However, if the transformation toward LEDs, OLEDs and LDs persists without any radical change or filtration of their blue light emissions, in a very short space of time we may see large numbers of the general population at a very much younger age being seriously affected by all sorts of serious eye problems including AMD.

The next chapter will take a brief look at macular degeneration (AMD) and how it terribly affects people.

CHAPTER ELEVEN

MACULAR DEGENERATION (AMD)

Age-related macular degeneration, or (AMD), is a particularly nasty eye disease that causes the loss of central vision in older adults over about 50 years of age. Macular degeneration is called AMD because it is usually “age-related” and develops as people get older. About 1 in 7 people presently over 50 develop it and it is getting worse.

As light passes through the pupil, it travels through a clear lens like the lens of a camera, which then focuses onto the back of the eye called the retina. When light reaches the retina, the retina processes the light signals into electric signals, which are then sent through the optic nerve to the brain, which converts the signals into images.

The centre of the retina is the macula. It takes up only about 2% of the retina, and the remaining 98% (peripheral field of vision) remains unaffected by the disease. What is most extraordinary is the fact that even though the macula comprises such a tiny part of the retina, almost half the visual cortex is devoted to processing macular information. It is even more incredible to observe how just relatively minor damage to this small part of the retina can produce such devastating vision loss. The reason why it is so serious is that the loss of central vision profoundly affects all visual functioning.

Macula “yellow spot”

The macula or macula lutea, literally from Latin, *macula* ‘spot’ and *lutea* ‘yellow’ is a tiny oval-shaped, highly pigmented “yellow spot” of two or more layers of ganglion cells, about 6mm in diameter in the centre of the retina of the human eye.

In the centre of the macula is the most sensitive part of the retina, called the fovea which is only very small, and it contains the largest concentration of cone cells in the eye. You need a healthy macula for normal, high resolution, central vision. It is made up of tightly-packed light-sensitive cells called rods and cones, nourished by a layer of blood vessels called the choroid.

The outermost surface of the retina is a layer of tissue called the retinal pigment epithelium (RPE) which is an important passageway. Nutrients travel from the choroid to the retina through the RPE. Waste products travel from the retina to the choroid through the RPE.

Because the macula is yellow in colour it absorbs excess blue and ultraviolet light that enters the eye, and acts as a natural sunblock for this delicate and most important area of the retina. The yellow colour in it is created by lutein and zeaxanthin, which are yellow xanthophyll carotenoids, derived from the diet. A diet rich in these substances is important to sustain a healthy macula. However, if too much blue light enters the eye, it doesn’t matter how healthy the macula is as it is still going to be severely damaged.

Fovea

When we use our central vision for reading, driving and performing most activities that require sharp, straight-ahead vision, the eye sees 20/20 at the fovea. Because the fovea is so very small and sensitive, just a small scratch or impediment in it can destroy central vision. **A scar on the fovea even just the size of a pinhead could cause 20/400 vision, which would prevent someone from driving a car or reading normal-sized print.** So when you get

even a relatively small amount of degeneration in the macula causing the cells to die, it doesn't take much for the disease to become very serious indeed.

Dry and wet forms

There are two primary forms of macular degeneration: The less-severe dry form and the wet form. Macular degeneration almost always starts off as the dry form. In dry AMD, cells in the macula start to die off much more quickly than in the 'normal' aging process. As macular function deteriorates, central vision decreases over time. Dry AMD may initially affect only one eye, but in most cases, both eyes eventually become involved.

Wet macular degeneration develops when new blood vessels called choroidal neovascularizations (CNVs) grow from the choroid underneath the macular portion of the retina. The new blood vessels leak fluid or blood – hence the term 'wet macular degeneration.'

Because almost everyone with the wet form of the disease starts out with the dry form, eyes with the wet form of macular degeneration almost always show signs of the dry form, including drusen and mottled pigmentation of the retina. If you develop wet macular degeneration in one eye, your odds of developing the disease in your other eye increase greatly. With the wet form of macular degeneration, sight loss is usually rapid and severe, resulting in legal blindness, defined as 20/200 vision or worse.

This means that what someone with normal vision can see from 200 feet, a person with 20/200 vision can see only from 20 feet. In most cases damage caused by macular degeneration cannot be reversed.

Although some patients do not even realize that they have the condition until they develop the wet form, most patients with AMD learn that they have the condition when it is still in the dry form and they have few or no symptoms.

The risk of developing AMD increases with age. Most studies show that people in their 50s have about a 2% chance of getting AMD, approximately 10% of patients 66 to 74, and this risk rises to 30% after the age of 75.

Causes

In the past, researchers have claimed aging, family history, genetics, Stargardt's disease (juvenile macular degeneration, STGD), drusen deposits, hypertension (high blood pressure), elevated cholesterol, obesity, fat intake, oxidative stress, race (AMD is more likely to be found in Caucasians than in people of African descent), smoking, vitamin D deficiency, poor nutrition, are the primary causes of macular degeneration.

However, numerous independent researchers have been controversially reaching the opposite conclusion, namely that there is a large and growing body of evidence proving excessive blue light exposure to the retina is the primary cause. Bear in mind much of this research is not new and some of it was completed prior to the recent widespread introduction of LEDs – which of course, are now going to make matters very much worse.

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http://en.wikipedia.org/wiki/AMD_Alliance_International

AMD Alliance International: Global cost of vision loss

AMD Alliance International is a non-profit coalition of the world's leading vision, seniors and research organizations from 26 countries working to raise awareness and understanding of age-related macular degeneration. It promotes the importance of education, early detection, knowledge of treatment and rehabilitation options. http://www.amdalliance.org/

On April 16, 2010, AMD Alliance International (AMDAI) released their first ever study with estimates of the global cost of vision loss – nearly $3 trillion ($US2,954 billion) for 733 million people living with low vision and blindness worldwide in 2010. http://www.amdalliance.org/cost-of-blindness.html

A list of the AMDAI membership is here: http://www.amdalliance.org/about-our-global-members.html

So perhaps, all of the millions of supposed "experts" – business executives, optical engineers, scientists, doctors etc. – employed by the over 5,000 corporations represented by the Global Lighting Association that manufacture LEDs – that are planning on dazzling the whole world's 'retina' with blue light – causing a global plague of AMD in the future – using the deception that they are going to "save the world billions of dollars per year" in reduced electricity generation and CO2 emissions in so doing – might like to reflect a little on the AMDAI study's global cost estimate of vision loss – and the countless suffering they are going to thrust upon untold numbers of new victims of AMD and other debilitating eye problems into the bargain!

But who really are **AMD Alliance International** – and what are their recommended treatments to cure AMD?

CHAPTER TWELVE

AMD ALLIANCE INTERNATIONAL: AMD TREATMENT & SNAKE OIL PEDLARS

AMD Alliance International

Virtually all of the world's foremost Age Related Macular Degeneration (AMD) organisations and blind institutions belong to, or are linked to AMD Alliance International (AMDIA). It was founded in 1986 by The Royal Institute of Blind People (RNIB) in the UK, Canadian National Institute for the Blind (now CNIB), Lighthouse International (founded in 1906 as The New York Association for the Blind – given its present name in 1989 – and was merged with The Jewish Guild for the Blind in January 2014 to become Lighthouse Guild International), Retina International (based in Zurich, Switzerland) and the International Federation on Ageing and Vision Australia.

Headquartered in London, with offices in Chicago USA and Tokyo Japan, today it is a massive global consortium of 70 of the world's leading organizations in ophthalmology, vision rehabilitation, research and advocacy in 26 countries. This giant organisation, largely now coordinates and sets the AMD eye-care policies and standards for all opticians and ophthalmologists over the entire world.

Membership

Virtually all the AMD awareness, care and treatment programs around the world now are coordinated directly by AMD Alliance International in London through its international member organizations. http://www.amdalliance.org/about-our-global-members.html

Membership Example: New Zealand

To provide a brief illustration of the incredible power of AMD Alliance International, the tiny country of New Zealand (where this author resides) provides a typical example replicated in all western countries. New Zealand geographically is about the same size as the UK or Italy, but has only about 4.5 million people, so it's very small and relatively easy to see who controls what. In New Zealand, there are three primary national organizations dedicated to helping blind people, The Royal Foundation for the Blind, Retina New Zealand Inc. and Macular Degeneration New Zealand. All are members of AMD Alliance International in London. The main organization of the three specializing in macular degeneration treatment is Macular Degeneration New Zealand.

If you go to their website http://www.mdnz.org.nz/about-us/ and click on "Sponsors & Supporters" you will see that among their main supporters and sponsors are the Freemasons (Luciferians), The Royal Australian and New Zealand College of Ophthalmologists (RANZCO), pharmaceutical companies, the drug company Bayer and the biggest and most corrupt pharmaceutical company in the world – Novartis AG, that just happens to be the manufacturer of Lucentis, the leading "snake oil" drug globally being used to treat AMD.

Like many similar organisations throughout the world, Macular Degeneration New Zealand is a charitable trust ostensibly designed to help blind people or people with eye disease

suffering from AMD, with eminent New Zealanders, business leaders, Knights, Dames and doctors appointed as trustees or ambassadors to the board – but the real truth is it is now simply a deceptive "front" for AMD Alliance International, and the major pharmaceutical companies that fund and pedal their snake oil drugs through it. The Macular Degeneration New Zealand website is packed full of Novartis International propaganda such as, *"In April 2008 after 4 monthly treatments of Lucentis my sight had not only stabilized, but improved…"* when in fact, this drug has never come close to curing anyone of AMD – ever! The whole situation is simply outrageous – an absolute disgrace.

Today, AMD Alliance International is simply now a "front group" for the global pharmaceutical mafia cartel dominated by Novartis International AG, similar to the mafia-style arrangement that Dutch Philips has with the Global Lighting Association cartel.

AMD Alliance International and collusion with Novartis AG

Although AMD Alliance International will never ever mention the fact, the organization's founding global sponsor was Novartis Ophthalmics, which still heavily funds and controls the Alliance. http://www.evaluategroup.com/Universal/View.aspx?type=Story&id=13603

Novartis Ophthalmics is, in turn, a division of the biggest pharmaceutical company in the world, Novartis AG.

Novartis International AG: This giant (British-controlled) Swiss company is headquartered in Basel, Switzerland and was founded in 1996 as the result of a merger of Ciba-Geigy and Sandoz. In 2013, the company had revenues of $US57.9 billion and employees 135,696. The company's business is divided into six operating divisions: Pharmaceuticals, Alcon (eye care), Vaccines and Diagnostics, Sandoz (generics), Consumer (divided into two divisions: Over-the-Counter and Animal Health) and Corporate.

Alcon was already the world's most profitable eye care company when Novartis bought it, with 2009 annual sales of $6.5 billion. In 2010, Novartis offered to pay US$39.3 billion to fully acquire Alcon, the world's largest eye-care company, including a majority stake in Nestle. Novartis had previously bought 25% of Alcon in 2008.

In 2005, federal prosecutors opened an investigation into Novartis's marketing of several drugs; Trileptal, an anti-seizure drug; three drugs for heart conditions – Diovan (the company's top-selling product), Exforge, and Tekturna; Sandosstatin, a drug to treat a growth hormone disorder; and Zelnorm, a drug for irritable bowel syndrome.

In September 2010, Novartis agreed to pay $422.5 million in criminal and civil claims and to enter into a Corporate Integrity Agreement with the US Office of Inspector General. According to the New York Times, "Federal prosecutors accused Novartis of paying illegal kickbacks to health care professionals through speaker programs, advisory boards, entertainment, travel and meals. But aside from pleading guilty to one misdemeanour charge of mislabelling in an agreement that Novartis announced in February, the company denied wrongdoing."

In September 2008, the US Food and Drug Administration (FDA) sent a notice to Novartis Pharmaceuticals regarding its advertising of Focalin XR, an ADHD drug, in which the company overstated its efficacy while marketing it to the public and medical professionals.

In April 2013, federal prosecutors filed two lawsuits against Novartis under the False Claims Act for off-label marketing and kickbacks; in both suits, prosecutors are seeking treble damages. The first suit accused Novartis of inducing pharmacies to switch thousands of

kidney transplant patients to its immunosuppressant drug Myfortic, in exchange for kickbacks disguised as rebates and discounts. In the second, the Justice Department joined a *qui tam,* or whistle-blower, lawsuit brought by a former sales rep over off-label marketing of three drugs: Lotrel and Valturna (both hypertension drugs), and the diabetes drug, Starlix. Twenty-seven states, the District of Columbia, Chicago and New York also joined.

Outside the US, Novartis markets the drug ranibizumab (trade name Lucentis), which is a monoclonal antibody fragment derived from the same parent mouse antibody as bevacizumab (Avastin). Both Avastin and Lucentis were created by Genentech which is owned by Roche; Roche markets Avastin worldwide as a treatment for wet macular degeneration and other retinal disorders; Avastin is also used to treat certain cancers. But because the price of Lucentis is much higher than Avastin, many ophthalmologists began having compounding pharmacies formulate Avastin for administration to the eye, and began treating their patients with it.

In 2011, four trusts of the National Health Service in the UK issued policies approving use and payment for administering Avastin for macular degeneration, in order to save money, even though Avastin had not been approved for that indication. In April 2012, after failing to persuade the trusts that it was uncertain whether Avastin was as safe and effective as Lucentis, and in order to retain the market for Lucentis, Novartis announced it would sue the trusts. However, in July Novartis offered significant discounts (kept confidential) to the trusts, and the trusts agreed to change their policy, and in November, Novartis dropped the litigation.

In the summer of 2013, two Japanese universities retracted several publications of clinical trials that purported to show that Valsartan (branded as Diovan) had cardiovascular benefits, when it was found that statistical analysis had been manipulated, and that a Novartis employee had participated in the statistical analysis but had not disclosed his relationship with Novartis but only his affiliation with Osaka City University, where he was a lecturer. The scandal led to several Japanese hospitals to stop using the drug and media outlets to run reports on the scandal and issues with the pharmaceutical industry in Japan.

In January 2014, Japan's Health Ministry filed a criminal complaint with the Tokyo public prosecutor's office against Novartis and an unspecified number of employees for allegedly misleading consumers through advertisements that used the research to support the benefits of Diovan.

http://en.wikipedia.org/wiki/Hoffman-La-Roche http://en.wikipedia.org/wiki/Novartis

Just a handful of about four giant investment conglomerates control the eight largest US financial institutions, in turn, that control the majority of wealth of the world including in the US and Europe: JP Morgan, Wells Fargo, Bank of America, Citigroup, Goldman Sachs, US Bancorp, Bank of New York Mellon and Morgan Stanley. Most public companies and banks are controlled by just ten major shareholders or less and in virtually every case those shareholders include: **BlackRock, State Street, Vanguard and Fidelity. (**There are others, but these are the biggest ones).

These "big four" investment vehicles control not only all the big US banks and corporations, but many of the European ones as well. While most people think the eight big financial institutions are American, the truth is they are all financial intermediaries controlled from the City of London Corporation.

These big four, in turn, control giant corporations like Alcoa, AT&T, Boeing, Coco-Cola, Dupont, Exxon Mobil Corp, General Electric, General Motors, Hewlett Packard, IBM, Intel, Johnson & Johnson, JP Morgan Chase, McDonald's, Merck & Co, Microsoft, 3M, Pfizer Inc., Procter & Gamble, Wal-Mart, Walt Disney, Viacom, Rupert Murdoch's News Corporation, CBS Corporation and Universal to name a few.

One of the "big four," **The Vanguard Group**, based in Malvern, Pennsylvania, USA, manages over $2 trillion in assets worldwide. It is the third biggest provider of exchange-traded funds in the US. Vanguard is owned by its clients, who just happen to be largely London-controlled financial institutions and pension funds. Vanguard has major shareholdings in over 5667 companies worldwide. Out of those, the ten biggest are: 1) Royal Dutch Shell, 2) Nestle Sa, 3) **Roche Holding AG**, 4) **Novartis AG**, 5) HSBC Holdings plc, 6) BHP Billiton Ltd, 7) BP plc, 8) Total Sa, 9) Toyota Motor Corp., and 10) Samsung Electronics Ltd.

Roche Holding AG: Founded in 1896 by Fritz Hoffman-La Roche, and headquartered in Basel, Switzerland, Roche Holding AG is the fifth-largest pharmaceutical company in the world. In 2013, it had total revenue of CHF 46.780 billion and employees 85,080. Most Swiss people think that the pool of shares controlled by the wealthy Hoffman-Oeri family descendants control Roche Holding AG. They once did, but not now. Novartis AG controls about a third of the shares in Roche and Vanguard Group controls a substantial amount of others.

Like Novartis AG and all the other big pharmaceutical companies, Roche AG is corrupt and can't be trusted. In 1999 the firm pleaded guilty to participation in a worldwide conspiracy to raise and fix prices for vitamins sold in the USA and globally. Hoffman-La Roche paid $500 million in criminal fines to the United States Government for the offence.

On 12 March 2009, Roche agreed to fully acquire Genentech in which it held a majority stake since 1990. Genentech became a wholly owned subsidiary group of Roche on 25 March 2009, for $46.8 billion.

Both drugs, Avastin and Lucentis, were created by Genentech and now these are the foremost two drugs used worldwide to treat wet macular degeneration and other retinal eye problems.

Plus, not only do the British banking oligarchy in the City of London through Vanguard Group control Novartis AG, that also indirectly controls Roche AG, that owns Genentech – Novartis AG owns Alcon Inc. the world's foremost provider of IOLs as well.

Alcon Inc. is the most profitable ophthalmic company in the world. It manufactures the (Acrysof) intraocular lens (IOL), the most commonly used implant in cataract surgery worldwide. Alcon alone operates in 75 countries and its products are sold in 180 countries.

AMD Alliance International Advisory Panel

http://www.amdalliance.org/about-scientific-advisory-panel.html

AMD Alliance International claims it has the *privilege* of having some of the *world's most eminent researchers* in the area of Age-related macular degeneration appointed to its Scientific Advisory Panel. They then go on to utter the following outrageous statement about the "independence" of their "expert advisors" on their website at the bottom of their listing under 'OUR ACTIVITIES.' http://www.amdalliance.org/about-activities.html and state:

- **"WE ENLIST PROMINENT SCIENTIFIC ADVISORS –** The Alliance has an impressive Scientific Advisory Panel comprised of independent, expert advisors to provide advice and information on AMD research, preventions, and treatments."

Presently there are 21 supposed " international experts" on their panel. As an example, the following is a list of just 10 of them with their connections to drug companies:

1. **Professor Francesco Bandello:** Professor and Chairman Department of Ophthalmology University Vita Salute – Scientific Institute, Milano, Italy. Professor Bandello reports he receives grants/research support from and serving on the speakers' bureau for **Alcon Laboratories**, Allergan, Bayer, **Novartis**, Pfizer and Solvay Pharmaceuticals. http://www.jhasio.com/template.cfm?TEMPLATE=include_programinfo.cfm&ID=40&ZoneID=10&TYPE=faculty
2. **Professor Alan Bird:** He has spent the majority of his time at the Institute of Ophthalmology at University College London and Moorfields Eye Hospital. Dr Bird was the Chairman of the Drug Safety Monitoring Committee for the development of Macugen by Pfizer / Eyetech. Dr Bird is a Fellow of the UK National Academy of Medical Science and has received a number of prestigious awards in vision science and ophthalmology, including the **Alcon Research Award**. http://www.icotherapeutics.com/alliances_and_global_licensing/strategic_advisory_board/
3. **Dr Gerald Chader:** Is currently Chief Scientific Officer at Doheny Retina Institute, USC Medical School, Los Angeles, California and is the Secretary of the Scientific & Medical Advisory Board of Retina International (one of the global AMD organizations that founded AMD Alliance International in London), based in Zurich, Switzerland. He has written over 300 scientific publications and has won several prestigious research awards including the ARVO Friedenwald Award and two **Alcon Institute Awards**. http://bmes-erc.usc.edu/brl/people/gerald-chader-profile.htm
4. **Professor Gregory S. Hageman:** Presently John A. Moran Presidential Professor, Director Translational Research Institute, John A. Moran Eye Center, University of Utah, Salt Lake City, Utah. Dr Hageman has served as an advisor to American Home Products, **Genentech, Alcon**, Allergan, Pfizer, ViroPharma, OccuLogix, **Novartis**, Tanox, Merck Sharp and Dohme and Sequenom. http://www.bakersfieldcollege.edu/centennial/100-stars/gregory-hageman
5. **Professor Frank Holz:** Vice-Chairman, Department of Ophthalmology, University of Bonn, Bonn, Germany. Professor Holz is **on the advisory boards** for Acucela, **Alcon**, Allergan, Bayer, GlaxoSmithKline, **Genentech**, Heidelberg Engineering, Optos, **Novartis** and Pfizer and has received travel, honorarium and research support from these companies. http://bjo.bmj.com/content/early/2013/07/12/bjophthalmol-2013-303232.full
6. **Professor Peter Humphries:** Professor Humphries is Professor of Medical Molecular Genetics and former Head of the Institute of Genetics at Trinity College, Dublin. He is a **member of the Alcon Research Institute USA** and holds the **Alcon Prize** for Outstanding Contributions to Vision Research 1993. http://retina.ie/retina-2011/speakers/prof-pete-humphries/
7. **Dr Jordi Mones Carilla:** Currently employed at Centro Medico Teknon, Barcelona, Spain. Has declared links with **Novartis**, Allergan, Bayer, **Alcon Ophthotech**, Natalvision, and has received lecture fees, consultancy fees, and travel grants from **Novartis.** http://www.myschdule.jp/woc2014/detail.php?sess_id=1360

8. **Dr Masahito Ohji:** Professor and Chairman, Department of Ophthalmology, Shiga University of Medical Science, Shiga, Japan. Dr Ohji is a consultant for Sanwa Kagaku Institute, Tokyo, and has received lecture fees from **Alcon Japan Ltd**, **Novartis Pharmaceuticals Ltd** Tokyo and Pfizer Japan. http://www.aaojournal.org/article/S0161-6420(09)00671-X/addOns
9. **Dr Jason Slakter:** Currently Clinical Professor of Ophthalmology at New York University School of Medicine and practices at the Vitreous Retina Macula Consultants of New York. In addition, Dr Slakter has been involved extensively in the design and application of new diagnostic and treatment modalities for ophthalmic diseases. As a Director of Digital Angiography Reading Center (DARC), a principal investigator of many clinical trials, and a pharmaceutical industry consultant, Dr Slakter has played a major role in the discovery, development and commercialization of treatments for age-related macular degeneration, diabetic retinopathy, retinal vascular disease, central serous chorioretinopathy and other retinal diseases.
   He has provided critical assistance in the design of clinical trials at all stages of development, and **has participated in numerous meetings with the FDA**. In addition, Dr Slakter served as **Chief Medical Officer for Potentia Pharmaceuticals from its inception through to its acquisition by Alcon Laboratories, Inc (Novartis)**. **He continues to oversee the ongoing clinical activities at Alcon** related to the lead product related to complement inhibition for treatment of age-related macular degeneration. http://www.sksocular.com/sks-ocular-leadership/jason-slakter/
10. **Lawrence A. Yannuzzi:** Is Professor of Clinical Ophthalmology, School of Medicine, Columbia University, New York. He has written over 400 scientific papers and 13 books. In 2003, he received a financial grant from the **Alcon Research Institute**. http://www.myalcon.com/research-development/alcon-research-institute/past-grant-recipients.shtml

So what is the AMD Alliance International Advisory Panel really? In reality, it is nothing more than a deceptive "front" or corporate facade for Novartis AG, the biggest pharmaceutical company in the world, to pedal its snake oil drugs and potions to unsuspecting people around the globe suffering from age-related macular degeneration and eye disease.

It is like a 21st Century form of 'Himmler's Nazi Inner Circle' of the scientific and medical establishment, working hand in hand with pharmaceutical and medical corporations to bring in its dictatorial, fascist United Nations World Health Organization police state. Now the corporate means of control are totally global, enslaving every nation on earth with corporate policies in eye care set not independently by nation states, but by huge multinational conglomerates.

The fact is, any five year old kindergarten child would know more and have a greater appreciation of what genuinely constitutes "independence" in this disgraceful glaring conflict of interest exhibited by these medical charlatans – promoted by AMD Alliance International with these highly paid Novartis medical drug pushers and unethical opportunists masquerading as genuine "independent" scientific and medical experts on their Scientific Advisory Panel.

Unfortunately, this endemic collusion between these multinational drug company profiteers and the world's corrupt scientific and medical community is now rampant.

These are only a few examples of the sort of widespread collusion that prevails between the drug companies and senior ophthalmic professionals and are only the tip of the iceberg.

DRY AMD and WET AMD TREATMENT:

What then, on the "expert," learned advice of the Advisory Panel, does AMD Alliance International actually recommend for all ophthalmologists and eye doctors around the world to treat AMD? This is what they say:

"Dry AMD: Although several new drugs are now available for the treatment of the exudative (wet) type of AMD, aside from cessation of smoking and a healthy diet of dark green leafy vegetables and fruits supplemented by zinc and anti-oxidant vitamins (Vitamins E, C, and beta carotene), very little is currently available to help patients with "dry" AMD to prevent progression to more serious stages of debilitating disease…"

http://www.amdalliance.org/treatments_dry_amd.html

Bear in mind, this is their entire medical recommendation for Dry AMD for the world! The author has no criticism of their recommendation to follow a good, well balanced diet, which most educated people already know, take for granted and don't need a misguided group of overeducated medical professors to tell them that. But they haven't even recognised the basic, primary cause which is now well established by independent research – that excessive blue light toxicity and hazard produced by artificial light, more specifically LEDs, is severely damaging the retina.

Wet AMD: Next, they transform themselves into psychopathic fraudsters, pharmaceutical puppets possessed by demons using African witch-doctor techniques and "snake oil" potions mixed with bare-faced lies to treat the more advanced and serious 'Wet' form of AMD, and say: http://www.amdalliance.org/treatments_wet_amd.html

"For people with the wet form of macular degeneration, there are treatment options available to help slow or stop the progression of the disease and in some cases, even restore vision."

So what are these principal "treatment options" they refer to? They are two snake oil drugs, **Lucentis** (ranibizumab) (at US$2000 to $2,500 a shot or $20,000 to $30,000 per year at present for just 12 injections into the eye of the patient), and the off-label drug **Avastin** (bevacizumab) (that is much cheaper and isn't even approved for ophthalmic use at all). Both these drugs are administered by intravitreal injection into the eye once a month ad infinitum until the patient either is mercilessly bankrupted, goes permanently blind or dies a miserable death from the serious adverse health effects of the drugs themselves.

This is not an exaggeration. The following includes a few snake oil secrets about Lucentis and Avastin your friendly doctor (drug pedlar and psychopathic killer) doesn't tell you about.

Lucentis (ranibizumab)

It is significant that this trade name for ranibizumab, *Lucentis,* is appropriately derived from the Latin word *lucens* 'to shine' (in medical terms 'translucent') from Latin *lux* and *lucis* 'light' being the same Latin roots for ***Lucifer*** (*lux* 'light' and *ferre* 'to bear' = 'light-bringer'). It would appear the same deceptive 'Devil' that cunningly sits on the Board of Directors of the Global Lighting Association is now sitting on the Boards of Genentech and Novartis also!

AMD Alliance International (which controls the global AMD medical program) makes these deceptive statements (mainly all deliberate lies) regarding treatment for Wet AMD using Lucentis on their website here: http://www.amdalliance.org/treatments_wet_amd.html This is what they deceptively claim:

"Lucentis (ranibizumab) is broadly available in the developed world and was a medical breakthrough because it was the first and only treatment clinically proven to restore vision in patients with wet AMD. In November 2011, EYLEA (aflibercept) gained FDA approval in the United States, and in March 2012 by the TGA in Australia.

In scientifically-sound randomized clinical trials, approximately 40 per cent of Lucentis-treated patients experienced a clinically significant sustained improvement in vision enough to resume driving. Ninety-five per cent of Lucentis-treated wet AMD patients maintain their vision. Delivered by intravitreal injection into the eye, Lucentis works to halt the proliferation of leaky blood vessels in the macula.

The safety and effectiveness of EYLEA was evaluated in two clinical trials involving 2,412 patients. People in the study received either EYLEA or Lucentis injection. The primary endpoint in each study was a patient's clearness of vision (visual acuity) after one year of treatment. EYLEA was injected into the eye by an ophthalmologist either every four weeks or every eight weeks. The studies showed that EYLEA was as effective as Lucentis in maintaining or improving visual acuity."

So is this the truth? Do ninety-five per cent of Lucentis-treated wet AMD patients maintain their vision or not? Are there any serious adverse side effects from the drug? The *Wikipedia* website http://en.wikipedia.org/wiki/Ranibizumab for Ranibizumab (trade name Lucentis) under sub-heading *Side Effects* say, "The most common side effects in clinical trials were conjunctive haemorrhage, eye pain, vitreous floaters, increased intraocular pressure, and intraocular inflammation… Serious adverse events related to the injection procedure occurred with an incidence rate of less than 1% and included endophthalmitis, retinal detachment, and traumatic cataracts. Other serious ocular adverse events observed among ranibizumab-treated patients (incidence rate < 1%) included intraocular inflammation and blindness."

The real truth, however, is vastly different than these deceptive claims.

The biggest, most popular, comprehensive and up-to-date source of drug information in the world now for consumers and healthcare professionals is, **Drugs.com.**

http://www.drugs.com/

The website was founded in September 2001, hosted in a data center located in Virginia, USA. The site is owned and operated by the Drugsite Trust, a privately held Trust administered by two New Zealand pharmacists. The site contains a massive library of reference information which includes content from Cerner Multum, Micromedex from Thomson Reuters, Wolters Kluwer Health, U.S. Food and Drug Administration (FDA), Physicians' Desk Reference, A.D.A.M., Stedmans, AHFS, Harvard Health Publications, North American compendiums, PharmaLive, and Healthday. It claims to provide free, peer-reviewed, accurate and independent data on more than 24,000 prescription drugs, over-the-counter medicines and natural products. This is what the site has to say about the Lucentis (ranibizumab) drug's side effects:

"Lucentis Side Effects: http://www.drugs.com/sfx/lucentis-side-effects.html *More common:* Blindness, bloody eye, blurred vision or loss of vision, decreased vision or other changes in vision, disturbed color perception, dizziness, double vision, dry eye, eye pain, fainting, feeling of having something in the eye, halos around lights, headache, night blindness, overnight appearance of lights, pain or tenderness around the eyes and cheekbones, red, sore eyes, redness of the white part of the eyes or inside of the eyelids, redness, swelling, or

itching of the eyelid, seeing flashes or sparks of light, seeing floating spots before the eyes, or a veil or curtain appearing across part of vision, sensitivity of the eye to light, tearing of the eyes, tunnel vision, watering of the eyes. *Less Common:* long list" etc. etc…

"For Healthcare Professionals: Ocular: Conjunctive haemorrhage (up to 74%), eye pain (up to 35%), vitreous floaters (up to 27%), increased intraocular pressure (up to 24%), vitreous detachment (up to 21%), intraocular inflammation (up to 18%), cataract (up to 28%), foreign body sensation in the eye (up to 16%), eye irritation (up to 15%), increased lacrimation (up to 14%), blepharitis (up to 12%), dry eye (up to 12%), visual disturbance or blurred vision (up to 18%), eye pruritus (up to 12%) ocula hyperemia (up to 11%), retinal disorder (up to 10%), maculopathy (up to 11%), retinal degeneration (up to 8%), ocular discomfort (up to 7%), conjunctival hyperemia (up to 7%), posterior capsule opacification (up to 7%), and injection site haemorrhage (up to 5%). *Cardiovascular:* Peripheral edema (up to 6%) and atrial fibrillation (up to 5%). *Gastrointestinal:* Nausea (up to 10%), constipation (up to 8%), and gastroesophageal reflux disease (up to 6%). *Hematologic:* Anemia (up to 11%). *Metabolic:* hypercholesterolemia (up to 7%). *Musculoskeletal:* Arthralgia (up to 11%). *Nervous System:* Headache (up to 12%), peripheral neuropathy (up to 5%). *Renal:* Renal failure (up to 7%), chronic renal failure (up to 6%). *Respiratory:* Nasopharyngitis (up to 16%), bronchitis (up to 11%), cough (up to 9%), upper respiratory tract infection (up to 9%) sinusitis (up to 8%), influenza (up to 7%) and chronic obstructive pulmonary disease (up to 6%)."

And into the bargain, to top off all these serious adverse reactions for many AMD sufferers, which these medical quacks and snake oil pedlars of Lucentis say largely don't exist on the scale that they do, after months and months of Lucentis injections into the eye and after the patient has finally gone stone cold broke, having been craftily robbed of his last dime by these opportunistic criminal fraudsters and gangsters – most AMD organizations publicly admit, as does the AMD Alliance International, in its webpage, *Overview* that there still "is NO CURE FOR AMD!" http://www.amdalliance.org/treatments_overview.html

In 2012, Novartis's income from the sales of the drug Lucentis alone, was $US2.398 billion.

Avastin (bevacizumab):

Both Lucentis (ranibizumab, sold by Novartis) and Avastin (bevacizumab, sold by Roche) are almost identical drugs, but Novartis charges up to 100 times more for Lucentis than Roche charges for Avastin. Where these drugs are used to treat AMD, Lucentis costs around $2ooo to $3000 a shot, while Avastin costs $100 a shot, so it is easy to understand why many ophthalmologists and eye surgeons prefer to use Avastin. But the trouble is, while Lucentis was officially approved by the FDA on June 30, 2006, to treat eye problems and neovascular AMD, the drug Avastin is entirely off-label which means it has never even been approved to treat AMD or eye problems at all. In itself, it is an entirely unethical practice that doctors use off-label drugs to treat their patients, but the practice is widespread around the world within the orthodox medical quackery profession which is what it is.

Avastin was approved by the US Food and Drug Administration (FDA) for certain metastatic cancers, first in 2004 for combination use with standard chemotherapy for metastatic colon cancer. It has since been approved for certain lung cancers, ovarian cancers, breast cancers and glioblastoma multiforme of the brain. In the US in 2008, the FDA gave bevacizumab (Avastin) provisional approval for metastatic breast cancer. In July 2010, after studies failed to show a significant benefit, extended life or quality of life, but that it caused serious adverse effects including severe high blood pressure and haemorrhaging, the FDA's advisory

panel recommended against it being used for breast cancer. The approval was subsequently revoked by the FDA on 18 November 2011.

Drugs.com http://www.drugs.com/sfx/avastin-side-effects.html states, among many others, some of the true side effects of Avastin use are:

"For Healthcare Professionals: general side effects including asthenia (up to 74%), pain (up to 62%), abdominal pain (up to 61%), infection (55%), fatigue (45%) headache (up to 37%), non-gastrointestinal fistula formation (less than 0.3%). *Gastrointestinal:* Vomiting (up to 52%), anorexia (up to 43%), constipation (up to 40%), diarrhea (up to 34%), stomatitis (up to 32%), dyspepsia (up to 24%), gastrointestinal haemorrhage (up to 24%), flatulence (up to 19%), weight loss (up to 16%), dry mouth (up to 7%), colitis (up to 6%). *Cardiovascular:* In one study, the rate of congestive heart failure (defined as NCI-CTC grade 3 and 4) in the bevacizumab (Avastin) plus paclitaxel arm was 2.2% versus 0.3% in the control arm… Congestive heart failure occurred in 6 of 44 (14%) patients with relapsed acute leukemia, hypertension (up to 34%), hypotension (up to 15%), deep-vein thrombosis (up to 9%). *Nervous System:* Dizziness (up to 26%), confusion (up to 6%), CNS haemorrhage (up to 5%), abnormal gait (up to 5%), sensory neuropathy (24.2%), headache (3.6%). *Hematologic:* Leukopenia (37%), neutropenia (21%), thrombocytopenia (5%). *Metabolic:* Hypokalemia (up to 16%), bilirubinemia (up to 6%). *Musculoskeletal:* Myalgia (Up to 15%), bone pain (3.9%). *Respiratory:* Fatal hemoptysis in patients with squamous histology (31%)."

In September 2007, a study from Brazil's *Anais da Academia Brasileira de Ciências* on Avastin titled, *The effects of the subconjunctival injection of bevacizumab (Avastin) on angiogenesis in the rat cornea* was published. www.redalyc.org/pdf/327/32779304.pdf or, Google, 'Anais da Acedemia Brasileira de Ciências – The effects of the subconjunctival injection.'

This extensive study was to evaluate the effects of the use of the subconjunctival injection of bevacizumab (Avastin) on angiogenesis in the rat cornea. Twenty male Wistar rats were used, divided up into groups. Among the results, the study showed that bevacizumab (Avastin) "can inhibit corneal neovascularization" in this rat in all tested groups, but was "far from complete". The researchers concluded, "It is interesting to observe that these findings demonstrate the effect of the bevacizumab inhibition in a short-time period. There are clinical data that reveal that bevacizumab intravitreous and intrastromal application can be transitory and persist only for a few weeks."

This is why both similar drugs, Lucentis and Avastin, have to be injected once a month or two to have any effect at all because their affect is only temporary, not permanent and cannot at all cure AMD.

In February 2011, *WebMD Health News* published an article by Brenda Goodman titled, *Cancer Drug Avastin Linked to Death Risk,* and writes:

http://www.webmd.com/cancer/news/20110201/cancer-drug-avastin-linked-to-death-risk

"Patients treated with Avastin, a top-selling cancer medication, appear to have a 50% increased risk of dying from treatment-related adverse events compared to the use of chemotherapy alone, a new research review finds. What's more, the risk of fatal problems like bleeding, blood clots and bowel perforations may more than triple when the biologic therapy Avastin is used with certain kinds of chemotherapy drugs, particularly taxanes or platinum medications.

But Avastin's manufacturer found fault with the study. Genentech, the maker of Avastin, says the study includes data in which Avastin was a treatment for types of cancer that are not on the FDA-approved list of uses for Avastin. The review, which will be published in the Feb. 2 issue of the *Journal of the American Medical Association*, pools the results of 16 studies of 5,589 patients who were taking Avastin for solid tumors of the colon, lung, breast, prostate, kidney or pancreas. Overall, patients who took Avastin, which is an antibody that is given by intravenous infusion, had about 50% more fatal adverse events compared to those on chemotherapy alone…"

On June 3, 2013, *Bloomberg* published an article by Naomi Kresge and Robert Langreth titled, *Roche's Avastin Drug Fails to Add Time in brain Cancer Study*. They write;

"Roche Holdings AG (ROG)'s Avastin failed to extend the survival of patients with deadly brain tumors in a study that found no advantage in using the drug as a first-line therapy against the cancer known as glioblastoma…

Roche, based in Basel, Switzerland, is counting on new uses of the medicine to help it reach the company's projected $7 billion in peak annual sales. Avastin is already sold for use against colon, lung and brain tumors. In November 2011, U.S. regulators revoked the drug's approval for use in breast cancer because it failed to prolong life in patients with the disease.

In the glioblastoma study, "the bottom line is that it didn't show any benefit as a treatment for newly diagnosed patients," said Mark Gilbert, a neuro-oncologist at the University of Texas MD Anderson Cancer Center in Houston who led the study. "The survival benefit was not there."

The government-sponsored study of 637 glioblastoma patients found that those who got Avastin along with chemotherapy lived a median of 15.7 months compared with 16.1 months for patients given chemotherapy alone. Patients who received Avastin also had a higher rate of side effects including hypertension, bleeding, and pulmonary embolism…

Some of the apparent brain tumor shrinkage seen with Avastin may actually be due to the drug's tendancy to make blood vessels in the brain less leaky, said Gilbert. By preventing fluid from leaking out, Avastin may make brain MRI scans look better even when cancer cells are not dying, said Gilbert…

Meanwhile, Avastin-helped women with an aggressive type of cervical cancer live almost four months longer in a trial that may give patients a new option for treatment. Women whose cervical cancer had spread lived an average of 17 months with Avastin plus chemotherapy, compared to 13.3 months with chemotherapy alone, in a 452-patient study also presented yesterday at the cancer meeting…

Metastatic, or spreading, cervical cancer isn't a curable disease. Patients tend to be among the younger population of people with gynecologic cancer, women in their 30s, 40s and 50s… The cost of a course of treatment with Avastin for cervical cancer in the U.S. would be about $78,700, Roche said in an e-mailed statement…"

Even for treatment of cancer patients other than AMD sufferers, Avastin's beneficial effects are questionable, apart from rapidly bankrupting the patient and making his life even more miserable while marginally delaying his blindness and untimely death. The whole disgraceful exercise is a deliberate scam, with no genuine intention ever to heal the patient at all, based on a litany of carefully crafted lies and fraud to ruthlessly extort as much money from the patient (or in some countries, the taxpayer) as possible.

Collusion between Roche and Novartis

On 6 March 2014, *thepharmaletter* (London) published a revealing article entitled, ***Roche and Novartis fined for cartelizing sales of eye drugs Avastin and Lucentis in Italy.*** http://www.thepharmaletter.com/article/roche-and-novartis-fined-for-cartelizing-sales-of-eye-drugs-avastin-and-lucentis-in-italy

They write;

"Swiss pharma majors Roche (ROG:SIX) and Novartis (NOVN:VX) colluded to exclude the cheaper cancer drug Avastin (bevacizumab), used in the treatment of the most common eyesight condition in the elderly as well as other serious sight problems, and channel demand towards the much more expensive drug Lucentis (ranibizumab), through an artificial distinction between the two products, says Italy's anti-trust authority, the Autorita Garante della Concorrenza e del Mercato (AGCM) in an announcement made yesterday.

The anticompetitive agreement caused the Italian National Health Service to sustain additional expenses estimated at over 45 million euros ($62 million) in 2012, while increased future costs might exceed 600 million euros per year. Novartis and Roche were imposed fines totalling 92 million euros and 90.5 million euros, respectively.

On 27 February 2014, the AGCM issued a decision finding that Roche and Novartis infringed article 101 TFEU by participating in an anticompetitive agreement in the market for ophthalmic drugs used to treat some serious vascular eyesight conditions, including age-related macular degeneration (AMD). AMD is the main cause of blindness in developed countries: in Italy alone a million people may be at risk of developing AMD.

According to the AGCM, this illicit collusion might have hindered access to treatment for many patients and caused the National Health Service to sustain additional expenses. The investigation was started in February 2013, on the basis of complaints filed by an association of private hospitals (Aiudapds) and the Italian Ophthalmic Association. The Region Emilia Romagna and the consumer association Altroconsumo intervened in the proceedings.

The gathered evidence shows that, since 2011, Roche and Novartis colluded to create an artificial product differentiation and purport Avastin as more dangerous than Lucentis, in order to influence prescriptions of doctors and health services...

Roche and Novartis set up a complex collusive strategy, with a view to avoiding that the commercial success of Lucentis be hindered by the ophthalmic applications of Avastin, the AGCM stated…

The economic rationale of the firms' conduct stems from the relationship between the Roche and Novartis groups; while Roche collects significant royalties from the sales of Lucentis, which has been developed by its subsidiary Genentech, Novartis benefits directly from Lucentis sales and holds a <30% equity stake in Roche. Genentech was not considered liable for the infringement, the AGCM noted. Sales of the drug for Novartis reached $2.4 billion last year, while Roche, which sells Lucentis in USA, recorded revenue of 1.7 billion Swiss francs ($1.9 billion) from the product…"

Then, nearly three months later, on May 29, 2014, *WSJ* published a further article about the scandal by Deborah Ball titled, ***Italy to Seek $1.6 Billion From Novartis, Roche Over Collusion Ruling.*** http://online.wsj.com/articles/italy-to-seek-1-6-billion-from-novartis-roche-over-collusion-ruling-1401353093

Deborah writes;

"Milan – Italy's health ministry will seek damages of €1.2 billion ($1.6 billion) from Novartis AG and Roche Holding AG in the wake of a ruling by the country's antitrust authority that the two Swiss pharmaceutical companies had colluded in preventing the distribution of an eye medication…

In Wednesday's statement, the health ministry said it was seeking compensation for damages occurring between 2012 and 2014. It said the pair had caused the National Health Service "considerable damage" and cited the anti-trust ruling. Novartis and Roche have denied the anti-trust's findings and said they would appeal… A resolution to the claim for damages could take years given the very long time it takes for court cases to be resolved in Italy."

World Medical Association (WMA)

The World Medical Association (WMA) is a mammoth international confederation (mafia-like cartel) of all the world's medical associations representing physicians worldwide. It was created by the British Medical Association in 1945 to replace the l'Association Professionnelle Internationale des Médecins, and established in Paris in September 1947, to become the one, main, recognized authority representing all doctors of the world in international medical affairs and practice. http://www.wma.net

As at 2013 it represented 102 national Medical Associations, 106 constituent Members and 1013 Associate Members and more than 10 million physicians. Today its Secretariat is situated in Ferney-Voltaire, France, adjacent to Geneva so that it can carry out close official relations with the UN World Health Organization (WHO) and other powerful UN organisations based in Geneva. Behind the scenes, it deviously works with governments, banks, and pharmaceutical companies, through many medical organizations and groups, including General Medical Councils (that maintain registers of doctors), so that if any physicians step out of line with the World Medical Association policies, they can either be disciplined or struck off the register and not allowed to practice. Hence, virtually the entire medical profession are enslaved in fear of the "Mafia Mob" at the top dictating its fraud and extortionate policies and rarely will they deviate from its strict conventions, orthodoxy and big-pharma snake oil peddling.

Orthodox Doctors: Quack medicines & snake oil pedlars

The Medical establishment for 150 years or more (or if the real truth be told, right back to the time of the pagan Greek physician Hippocrates [460 – 370 BC] considered the father western medicine) have consistently derogatorily referred to those who use naturopathic medicine, natural remedies, nutrition, vitamins and mineral supplements, or those who are anti-vaccination or anti-big-pharma-drugs to prevent or heal disease – as derided "Quacks," "Snake Oil Pedlars" or "Vitamin Pushers."

But the real truth is, more often than not, it is the orthodox medical fraternity themselves who are the real Quacks and snake oil salesmen, with of course, their fraudulent pharmaceutical accomplices, the chief drug-pushers and manufacturers of the poison at the top.

Of course, the term, "quack medicines" derives from the archaic Dutch word "*quacksalver*" meaning 'boaster who applies a salve' and the German word, "*Quacksalber*" meaning 'questionable salesperson' and that is quite correctly what they really are.

Only recently, earlier this year in Melbourne, Australia, *The Age* published a succinct article by Dr Joe Kosterich on April 16 2014, entitled, ***Tamiflu is the new snake oil.*** http://www.theage.com.au/action/printArticle?id=60040484

Dr Kosterich writes;

"In days of old when the snake oil salesman came to town folks would gather round to hear of miracle cures… Could doctors, advisory panels, and health departments have been sold modern day snake oil? Unfortunately, the answer is yes!

The anti-viral drugs Tamiflu (oseltamvir) and Relenza (zanamivir) have been promoted as a treatment for influenza. But most specifically, they have been claimed to reduce transmission of influenza and reduce complications such as pneumonia. Governments have bought them so that they can be released in the event of an epidemic.

But recent research has found that these drugs are little more than today's snake oil potions. A review of 46 studies on more than 24,000 people has shown that they do not prevent people catching the flu. They do not reduce the rate of complications or hospitalizations. At best, they might reduce the length of the illness by about half a day. Let me repeat that – it shortens the course of influenza by half a day, at best!

How could so much money get spent on something of so little value? That is because the drug manufacturers refused to release most of the data that is now available. Only information from drug trials, which showed a positive effect from the drug, was previously published… Between 48% and 89% of researchers involved in clinical trials of new treatments have been found to have undeclared conflicts of interest. This occurs where the company that has a new drug being studied may pay them directly or indirectly.

Governments look to advisory panels for independent advice. Some 75% of doctors on panels, which make recommendations about disease definitions and management, have ties to the pharmaceutical industry…"

Medical doctors even have the cheek to run a website called *Quackwatch.* Here is one of their articles titled, *Twenty-Six Ways to Spot Quacks and Vitamin Pushers* that these imbeciles have written attacking those who support alternative medicine, proper nutrition and vitamins. http://www.quackwatch.com/01QuackeryRelatedTopics/spotquack.html

In February 2012, around 400 high profile doctors, medical researchers and scientists joined forces to form a lobby group, Friends of Science in Medicine (FSM), in order to have '*alternative medicine*' degrees removed from all Australian universities.

Here is the article**, *War against natural medicine*.**http://www.abc.net.au/news/2012-02-21/schwager-war-against-natural-medicine/3840682

By and large the medical profession are so arrogant, ignorant, self-centred, and money-hungry, *NutritionFacts.org* (incidentally run by a rare, genuine, "good" doctor) published a remarkable video on November 14, 2011, of medical associations, including the California Medical Association actually opposing a Bill to Mandate even just 7-hours entire Nutrition training in their four or five-year medical college degree courses before 2017!

Here is the shocking video-clip: http://nutritionfacts.org/video/medical-associations-oppose-bill-to-mandate-nutrition-training/

Roche and Novartis: Vaccines

While beyond the scope of this chapter and book, these same two corrupt Swiss pharmaceutical giants Novartis (supplier of Lucentis) and Roche (supplier of Avastin) for AMD, are also big manufacturers of various vaccines which are even more damaging to human health around the world. A particularly good website of many, run by a concerned Swiss whistleblower exposing vaccine damage and adverse reactions to human health is here: http://www.vaccinationinformationnetwork.com/

One Answer to Cancer DVD

Perhaps, one of the greatest, outstanding natural products on the world market today to cure cancer, particularly skin cancers, is an Australian product that costs almost nothing called "Black Salve." The salve is made up from a recipe including bloodroot, chaparral, graviola, galangal, water, zinc chloride, DMSO and glycerine. Here are links to the DVD '*One Answer to Cancer*', recipe and information about it:

http://www.oneanswertocancermovie.com/
https://archive.org/details/OneAnswerToCancer_201305
http://jagace2000.webs.com/cureforcancer.htm
http://www.youtube.com/watch?v=MLF2SavaCXU

Yet, believe it or not, in 2012, the Australian medical and pharmaceutical establishment and government agencies that they control, were so upset with this DVD *One Answer to Cancer* revealing this almost "miracle cure" using Black Salve to cure cancer (that anyone can make up in their own home for a few dollars), that they pressurized the Australian/NSW Therapeutic Goods Administration (TGA) to stop the Australian Vaccination Network (AVN) for advertising and selling it. While it is still available from other sources today, there are further plans afoot to more aggressively ban it in Australia and the rest of the world.

While dermatologists and skin specialists continue to charge exorbitant fees to use poisonous drugs like Aldara (Imiquimod) and Efudex (Flourouracil), often with serious long-term adverse health effects for many people, or simply use the doctor's scalpel to treat skin cancers – Black Salve works far more successfully, quickly and costs virtually nothing.

Adrian Jones, a naturopath, and major supporter of Black Salve in Australia, uses the expression, "Vote for nature's scalpel rather than the doctor's scalpel." Never were truer words spoken. It is an irrefutable fact that ALL ORTHODOX MEDICINE has tunnel vision focussed not on nutrition, prevention or basic natural remedies, but on SURGERY that costs an arm and a leg and if it doesn't kill the patient it will leave him bankrupt.

The Staff of Asclepius

While few physicians will even be aware of it, this trance-like 'tunnel vision' in most doctors with the preoccupation to reject natural remedies, nutrition and prevention, but rather use *surgery* is an evil spiritual power within all of them imparted through their demonic logo of the World Medical Association. The logo goes right back to the paganism in ancient Greece. It is the Serpent of Satan coiled around the Staff of Asclepius, the ancient pagan Greek god of Medicine and Healing. The Greek word *Asklepios* literally means "to cut open." Hence, the reason why doctors call their consulting rooms *surgeries* from Greek word *kheirourgia* from *kheir* 'hand' and *érgon* 'work.' It is a mind-set saturated with religious dogma going right back to Hippocrates in ancient Greece.

In the doctor's Hippocratic Oath, at least until recently, all doctors throughout the world literally made an oath to Apollyon and Asclepius. In ancient Greece, Asclepius was worshipped by the masses as a god/man, the personification of the miracle working physician of consummate medical skill, whose patients prayed to and placed their religious faith in. It was a supernatural, blind faith in medicine and physicians, that by and large knew very little about life and death at all. That led (and still exists in the minds of many people today), in mythology, to finally motivate Zeus to kill Asclepius with his thunderbolt, because he claimed he raised Hippolytus from the dead and made the mistake of accepting gold for it. Herein, belies the ultimate demise of the medical profession – money!

If they can't make any money out of it, they don't want it

The truth is, today, the majority of these money-hungry Medical and Pharmaceutical mafia to not want to support any good, simple disease prevention methods or natural remedies at all – because they can't make any money out of fit and healthy people! They actually want everyone to keep getting sick. That's why they have the Serpent, symbol of the Devil, wrapped around the staff of Asclepius as their badge of honor.

Big Pharma and the Mafia

On October 22 2013, whistle-blower author in the UK, Lynne Mctaggart, wrote a very succinct and informative article titled, *Big Pharma and the Mafia* about the collusion and organized crime in the medical and pharmaceutical industries.

http://www.lynnemctaggart.com/blog/242-big-pharma-and-the-mafia

Lynne writes:

"It's not a good time to be a drug company employee. Increasingly, those at the top of Establishment medicine are joining the ranks of whistle-blowers like us calling for medicine to be decoupled from the pharmaceutical industry. One of the biggest canaries at the moment is Peter Gøtzsche, none other than the head of the Nordic Cochrane Centre, the Scandanavian arm of the Cochrane Collaboration, an independent research and information centre committed to preparing, maintaining, and disseminating reviews of the various treatments of mainstream medicine and examining whether they have adequate evidence of safety and effectiveness. Cochrane was the first group of individuals to champion the notion of 'evidence-based' medicine – that is, medicine shouldn't be used unless there's evidence that the stuff works…

Gøtzsche's latest book, entitled *Deadly Medicines and Organised Crime: How Big Pharma has Corrupted Healthcare* (Radcliffe Publishing Ltd) pulls even fewer punches. The book essentially makes the point that the drug industry uses virtually every tactic used by the mob to sell its products. He even quotes a former vice-president of Pfizer as saying, "It is scary how many similarities there are between this industry and the mob. The mob makes obscene amounts of money, as does this industry. The side effects of organized crime are killings and deaths, and the sides effects are the same in this industry. The mob bribes politicians and others, and so does the drug industry."

Perhaps even more extraordinary than the careful case made by this blunt soothsayer is the fact that Richard Smith, the former editor of the British Medical Journal, agreed to write the book's foreword. In the book, Smith points out, the characteristics of organized crime include extortion, fraud, federal drug offences, bribery, embezzlement, obstruction of justice of law enforcement, tampering with witnesses and political corruption. "Peter produces evidence, most of it detailed, to support his case that pharmaceutical companies

are guilty of most of these offenses," says Smith. Indeed, most of the billions paid out as fines by the drug industry for flouting the law are thought of as 'the cost of doing business'…

"As an epidemiologist with very high numerical literacy and a passion for details so that he is a world leader in critiquing clinical studies, Peter is here on very solid ground," says Smith. "He shows too how the industry has bought doctors, academics, journals, professional and patient organizations, university departments, journalists, regulators and politicians. These are the methods of the mob."

This is only the latest canary from among Establishment medicine to blow the whistle on Big Pharma.

Marcia Ancell, the editor for two decades at the New England Journal of Medicine, recently published her own book: *The Truth About the Drug Companies: How They Deceive Us and What To Do About It.* All of the major medical journals, from the BMJ and the Lancet, to the Journal of the American Medical Association and the New England Journal, have revealed the scale of the problem – that correctly prescribed drugs are the fourth leading cause of death, that drug companies massage and make up data. Medicine should be a gift to us all rather than a money-making scheme for the pharmaceutical industry, as it now largely is.

With that in mind, we suggest that the following be implemented.

(1) An independent funding body should be created to finance all medical trials, whether of drugs, other forms of therapy or alternatives.
(2) Doctors should be required to spend one year of their five-year training learning about nutrition, alternative modalities and new possibilities.
(3) Drug-company influence should be entirely excluded from medicine, from training colleges and from trips abroad.
(4) Doctors should be rewarded for adopting non-drug therapies, thus saving the nation at least one small part of the £160 billion spent every year on drugs by the NHS.

But most of all, we need to open up the entire field of cancer – our understanding of what it is, what causes it and how it could be treated – while taking on board new understandings of the body and the impact upon it of the environment, stress and emotions. As a researcher once commented when asked whether research into alternative healing should continue, "We can't find the answers if we don't keep asking the questions…""

How will AMD Alliance International and World Medical Association respond to blue light toxicity from LEDs causing AMD, other serious eye and health problems?

Even before the recent advent of LEDs, age-related macular degeneration (AMD) was the leading cause of irreversible vision loss in Australian, North American, and Western European older populations.

In the United States alone at present, the number of people with visually impairing AMD is expected at least to double and reach 3 million by 2020.

The global Lighting Association plans to convert most the world's lighting to LEDs by 2020 also. Most smartphones, iPhones, iPads, tablets, computer monitors and TVs now have back-lit LED or OLED screens emitting high spikes of blue light radiation damaging the retina.

Can you imagine the effect that this is going to have in accelerating serious eye problems like PREMATURE Macular Degeneration in the future?

There is nothing wrong with honest, responsible business and truly “the labourer is worthy of his hire.” (Luke 10:7). Business men and women, scientists and doctors all have to make a living like everybody else.

The aim of this book is not to “throw the baby out with the bath water” and repudiate all business, medicine, drugs, surgeries, medical care etc. provided by the medical and pharmaceutical industries. Some of it is in fact remarkably good, so let’s not forget that. But a good deal of it is incredibly evil – let’s acknowledge that as well.

Are there any good, genuine scientists and medical doctors left at all? Yes there are, although they are now in a huge minority. The main problem is they are heavily controlled through their associations and councils that in turn collude with pharmaceutical companies.

And lest we forget the UN and WHO, that in turn now dictate all the strict national government healthcare policies throughout the world, thus enslaving even those who would be good medical physicians in political, economic and medical straightjackets. They are all in a very perplexing position and ever more increasingly so, just as medical doctors and scientists previously were under the Nazis.

On the rare occasions, when doctors do vociferously speak up publicly against convention or orthodoxy they are usually heavily disciplined and if they persist, are struck off the register so that they cannot continue to practice anymore and end up losing their livelihood after years of study at university.

Today very few scientists or doctors are truly independent of either big business, government, or both, and they have huge pressures to conform continually being placed upon them.

Usually the businessmen, scientists, doctors or professors who do speak up and blow the whistle are those who are older, have left the industry, or have retired and no longer have anything to lose. These whistle-blowers who do speak up are certainly very courageous people to be cherished and admired, but it is still a sad indictment against the general scientific and medical fraternity as a whole that so few people do speak up until the ‘horse has bolted’ and at the point they have less economic benefit to lose.

Hence, in light of this dark, foreboding chapter outlining the interminable widespread deceit, extortion, monetary greed, lack of basic morals, ethics and simple honesty of the wider business, scientific, academic, pharmaceutical and medical professions – concentrated in AMD Alliance International and the World Medical Association (representing over 10 million doctors alone) – one can foresee no meaningful action being taken at all in the future by these immoral charlatans to either acknowledge or act against blue light hazard from LEDs as a major cause contributing to serious eye problems and premature AMD – before it is too late.

To be deceptively fleeced of one’s money and life savings is bad enough, but to be subtly robbed of one’s sight prematurely through AMD, is much worse and is a terrible affliction and crime indeed.

Even if one strongly disagrees with the fundamental premise that AMD and other serious eye problems are now being quickly accelerated by blue-light toxicity from LEDs – there is still a literal mountain of evidence from extensive laboratory rat experiments that show LED blue light toxicity does severely damage their retinas.

So like any “off-label” drugs or products, why are we still persisting in using LEDs before they have been properly tested and their long-term biological effects on human eyesight and health is properly settled? The whole medical science supporting them is an utter disgrace.

Primitive tribal black witchdoctors in Africa

Think about this:

All of the [supposed] highly trained, top medical eye specialists and doctors throughout the world are presently still treating age-related wet macular degeneration primarily by “jabbing sharp needles into the eyes” of their naïve patients once a month – by injecting snake oil poisonous drugs, Lucentis and Avastin, into their eyes – drugs that clearly don’t work, and have absolutely no hope of ever curing AMD in anybody at all – no, not in this world or in the world to come! – **EVEN THE BONE-THROUGH-THE-NOSE, PRIMITIVE TRIBAL WITCHDOCTORS IN THE REMOTE OUTBACK AREAS OF AFRICA DON’T COME NEAR TO DOING THAT!!! So who precisely are the real witch doctors?**

Ironically, will the world in fifty years’ time mockingly look back in utter amazement, derision and shame – not only at the blue-light razer gang of common light bulb robbers hanging at the local gallows – but also another Nazi-style Doctor’s Trial as well into the bargain?

Will a time arrive in the future, when the majority of people will finally wake up, look back with numbing amazement, and introspectively reflect on how easily these professional gangsters and liars in the pharmaceutical industry and medical mafia, who claim now to possess such superior intellect and qualities over others – ever did gain so much power, ignominy and filthy lucre, through just jabbing venomous needles into the eyes of their unsuspecting victims and selling poisonous snake oil to primitive natives?

CHAPTER THIRTEEN

LED BLUE LIGHT: MACULAR DEGENERATION

On 1 July 2005, *Living Well with Low Vision* published an article taken from a book, *'Macular Degeneration – The Complete Guide to Saving and Maintaining Your Sight'* by Lylas Mogk, M.D. and Marja Mogk published in '*Health and Nutrition*. They write;

http://lowvision.preventblindness.org/health-and-nutrition/blue-light-and-macular-degeneration

"In many primate studies, blue light has been shown to cause a photochemical reaction that produces free radicals in the RPE and the rods and cones. Researchers believe that these free radicals interact with the high oxygen and lipid content in human rod and cone tips to produce abnormal chunks of metabolized waste that cannot be properly processed by the RPE, clogging up the macula's maintenance system and producing dry macular degeneration.

Melanin, is the substance that gives eyes their color, protects the macular by trapping light rays so they don't reach the macula and cause damage. People with fair skin and blue or light-colored eyes may be particularly susceptible to macular damage by blue light because they have less melanin in their irises. Their blue eyes transmit up to one hundred times as much light to the back of the eye as dark colored eyes do. Additionally, when the light reaches the choroid and RPE of people with fair skin and blue eyes, there is less melanin there to absorb the radiant energy, leaving these tissues more vulnerable to light damage. Can blue eyes cause macular degeneration? Can you reduce your risk by protecting your eyes from blue light? The answer is maybe…

Unlike UV light, blue light is visible to humans. Blue light waves are what makes the sky or any other object appear blue. Because blue light waves are short they scatter easily, so a great deal of glare we experience from sunlight also comes from the blue light. Since we can't see UV light we also can't see the lens filter used to protect us from UV rays. Conversely, since we can see blue light, we can also see blue blockers, the lens filters that block blue rays. Blue blockers do not act like regular sunglasses. They appear tinted, but they do not reduce overall light or make the world look darker. They offer the appearance of blue and green colors and reduce glare, but they don't affect the way other colors appear. In fact, they may even improve color contrast."

On 3 October 2011, *Living Well with Low Vision* published another outstanding article by Dan Roberts (Founding Director of Macular Degeneration Support) entitled, *Artificial Lighting and blue Light Hazard*. http://lowvision.preventblindness.org/daily-living-2/artificial-lighting-and-the-blue-light-hazard This study is well written and easily understandable for lay people. Here are some 'Random Quotes' from this extensive article:

1. **"…people with the highest levels of exposure [to UV-A, UV-B, and blue light] in the middle of the day had two fold increased risks of AMD. Our results showing the increased risk from high exposures to solar radiation underline the importance of ocular protection**

in European populations." Augood, C et al. Age-related maculopathy and macular degeneration in elderly European populations: the EUREYE study, 2004.

2. **"The photoreceptors in the retina … are susceptible to damage by light, particularly blue light. The damage can lead to cell death and diseases."** Shaban H. Richter C. A2E and blue light in the retina: the paradigm of age-related macular degeneration. Biol Chem 2002 Mar-apr: 383 (3-4): 537-45.

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- For further scientific rationale and references regarding the potential blue light hazard, see: **Recommendation of protective eye wear for patients suffering from degenerative retinal diseases.** (Ch.Remé, Laboratory of Retinal cell Biology, University Eye Clinic, Zurich, Switzerland).

Recommendation of Protective Eye Wear for Patients Suffering From Degenerative Retinal Diseases: [Ch. E. Reme, Laboratory of Retinal Cell Biology, University Eye Clinic, Zuerich, Switzerland].

http://www.medicinedocshare.com/html/2_Swf_RECOMMENDATION%20OF%20PROTECTIVE%20EYE%20WEAR%20FOR%20PATIENTS%20SURRERING%20FROM%20DEGENERATIVE%20RETINAL%20DISEASES_33439.html

"On the basis of recent research data the scientific and medical advisory board of Retina International strongly recommends UV-blocking and blue-reducing sunglasses for patients affected with retinal degenerations and dystrophies.

For review of human light damage: [23, 24, 16]

Apart from possible contrast enhancement and reduction of visual comfort by minimizing glare, there are now medical indications for the use of protective sunglasses. The overall level of transmission of visible light in such glasses may vary according to the needs of the respective patients, however, UV-blockade (i.e. at 400nm) and a reduction of blue light transmission (i.e. up to 470nm) is mandatory in view of several scientific publications (see below).

Scientific rationale:

A growing number of animal models which mirror human retinal dystrophies and certain cases of human RP show an increased sensitivity to bright light exposure, which accelerates the death of visual cells [4, [22,15,1, [3,12,10]. There is also increasing experimental

evidence for light as a risk factor initiating or enhancing age-related macular degeneration [17,18,20,14,19].

Conclusive experimental evidence reveals that short wavelength blue light has a distinct potential to damage and destroy visual cells. [2,9,7,8,11,6, [13,21]

Even though epidemiological studies regarding prevalence of AMD in relation to sunlight exposure are controversially discussed, recent evidence from a longitudinal, population based study indicates that extended exposure to sunlight in teenagers and young adults is associated with the development of early AMD in later years of life [5]."

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Professor Richard Price: The LED Blue Light Hazard in Medicine and Dentistry

Professor Richard Price, Dalhousie University, Halifax, Canada, in 2012 produced an excellent 4-minute video demonstrating the inherent dangers of Blue Light Hazard in Medicine and Dentistry relating to dental curing lights and magnification loupes linked to photoretinitis, premature aging of the retina and Macula Degeneration (AMD). This video clip is excellent: http://www.youtube.com/watch?v=VfCmL4Kz2iw

Professor John Marshall, London.

More recently, Professor John Marshall, one of Britain's leading eye experts, has courageously come out, unequivocally taking a stand against low-energy bulbs, CFLs and LEDs, suggesting their use could lead to blindness.

Presently he is Professor of Ophthalmology at the University College, London Institute of Ophthalmology. Professor John Marshall is Honorary Distinguished Professor at Cardiff University; Emeritus Professor of Ophthalmology, Kings College London; Frost Visiting Professor Optometry & Visual Science, City University; Honorary Professor, School of Health Science, Caledonian University. From 1991-2009 he was the Frost Professor of Ophthalmology and Chairman of the Academic Department of Ophthalmology, at St Thomas' Hospital. From 1982-1991 he was Sembal Professor of Experimental Ophthalmology at the Institute of Ophthalmology.

Further, he has spent the past forty years in research of ocular problems concentrating on the inter-relationships between light and aging, the mechanisms underlying age-related, diabetic and inherited retinal disease and the development of lasers for use in ophthalmic diagnosis and surgery. His work has resulted in over four hundred research papers and numerous book chapters and books. He has invented and patented the revolutionary Excimer laser for the correction of refractive disorders with in excess of 35 million procedures now having been undertaken worldwide. He also created the world's first Diode laser for treating eye problems of diabetes, glaucoma and aging. He is editor and co-editor of numerous international journals.

He was awarded the Nettleship Medal of the Ophthalmological Society of the United Kingdom, the Mackenzie Medal, the Raynor Medal, the Ridley Medal, the Ashton Medal, the Ida Mann Medal and the Lord Crook Gold Medal of the Worshipful Company of Spectacle Makers, the Doyne Medal of the Oxford Congress, the Barraquer Medal of the International Society of Cataract and Refractive Surgery, the Kelman Innovator Award of the American Society for Refractive and Cataract Surgery and the Lim Medal of the Singapore National Eye Centre. He has been visiting professor at universities on every continent, and in 2014 was elected to receive the Junius-Kuhnt-Award for his work on AMD. https://iris.ucl.ac.uk/iris/browse/profile?upi=JMARS81

On 12 May 2014, the UK's *Daily Mail* published a shocking article referring to statements by Professor John Marshall titled;

The medical experts who refuse to use low-energy light-bulbs in their homes: Professors have stocked up on old-style bulbs to protect against skin cancer and blindness. So should you be worried? http://www.dailymail.co.uk/health/article-2626564/The-medical-experts-refuse-use-low-energy-lightbulbs-homes-Professors-stocked-old-style-bulbs-protect-against-skin-cancer-blindness-So-YOU-worried.html The following are some brief extracts from this informative article:

"How would you view a man who's stockpiled a lifetime supply of old-fashioned light-bulbs because he believes low-energy bulbs could lead to blindness? You might well dismiss him as dotty. But the man in question, John Marshall, is no crank. In fact, he's one of Britain's most eminent eye experts, the professor of ophthalmology at the University College, London Institute of Ophthalmology. So concerned is he that he has boxes stacked with old-fashioned incandescent light bulbs at home. "I bulk bought incandescent light bulbs before the Government made it illegal to import them," he says. "I can't give you an exact number, but I have enough to see me out."

Nor is he alone in his concerns about modern light bulbs. Another eminent British professor, John Hawk, an expert in skin disease, is warning they may cause sunburn-like damage, premature aging and even skin cancer. He doesn't have any low-energy bulbs in his house, explaining: "I have lots of old style bulbs I bought in bulk when they were available."

… The concern is about some of the light rays emitted in high levels by these bulbs, says Professor Marshall. Recent scientific evidence shows these specific rays are particularly damaging to human eyes and skin. Light is made up of a spectrum of different coloured rays of light, which have different wavelengths. As he explains, “Light is a form of radiation. The shorter the wavelength, the more energy it contains. The most damaging part of the spectrum is the short wavelength light at the indigo/violet end of blue. Incandescent bulbs did not cause problems, but these low-energy lamps emit peaks of blue and ultraviolet light at this wavelength. In the same way ultraviolet rays in sunlight can cause premature aging in our skin if we get sunburnt, there is a similar situation in the eye, says Professor Marshall.”

… “Sustained exposure to ultraviolet light wavelengths from CFLs increases the risk of two seriously debilitating eye conditions, macular degeneration and cataracts,” the professor claims. “With macular degeneration, the macula, which is at the centre of the retina, becomes damaged with age. A cataract is a clouding of the lens inside the eye. These are two leading causes of blindness in Britain.”

“If you are in a country with high levels of ultraviolet light, your eyes will age faster,” he says. “This is why the incidence of cataracts is earlier and greater nearer to the equator, where sunlight is at its strongest, so there is more light across all spectrums. CFLs may have a similar effect. The exposure can also significantly increase your risk of macular degeneration. The biggest risk factor for this is age, as it commonly starts to affect people from 60 to 80. You will almost certainly exacerbate that risk with low-energy light bulbs,” adds the professor, who last month warned his colleagues of the dangers at Optrafair, a national education forum for opticians.

But it’s not just your eyes that may be at risk from these light bulbs. Professor John Hawk, the retired head of the photobiology unit at St John’s Institute of Dermatology, King’s college, London, warns: “There is good evidence that the CFLs that have been foisted upon us emit radiation sufficient to cause damage to the skin if used close by for long enough.” He says the risk is particularly high if the bulb is a metre or less from your body, which is common as people use them in reading lamps. “There is evidence that demonstrates that the lamps can not only cause damage to skin, but also short-term symptoms such as sun rash and prickly heat, a condition that medically is called polymorphic light eruption.”

… Low-energy bulbs are also known to cause trouble to people who have lupus, an auto-immune disorder that typically affects the skin, joints and internal organs. Irritation caused by ultraviolet light worsens the rashes, joint pain and fatigue associated with the disease. According to the Lupus Foundation of America, up to two-thirds of people with the condition are sensitive to CFLs… “Migraines and epilepsy are also problems,” says Professor Hawk. “I have seen 30 skin patients in my clinic who have been experiencing these problems linked to the bulbs.”

… Meanwhile, an EU spokes-person told the Mail that “based on scientific evidence, an EU scientific committee in 2008 and the UK’s Health Protection Agency came to the conclusion that in normal use compact fluorescent lamps do not pose risks to the general public.” However, Professor Moseley is not convinced. He says that what’s needed is better legislation from the EU on the quality and safety of low-energy lighting. “But they are very reluctant,” he says. “Their feeling is that it is the sufferers’ problem. In Brussels, the carbon emission targets take precedence.”

Eye expert Professor Marshall has a far simpler, if rather blunt, solution. “I would like to urge the manufacturers of these light bulbs to get rid of them.”

CHAPTER FOURTEEN

LED BLUE LIGHT: CAUSES RETINAL CELL DEATH IN RATS

Today the global use of LED lighting produced by Light-emitting diodes (LEDs) is growing exponentially, at a massive pace not only in terms of domestic and commercial lighting, but also for other application like street lighting, car headlights, personal devices such as smartphones, computers and TV screens etc.

This enormous change in the global lighting environment is so radical that within about 5 years, the global lighting cartels expect LEDs will have replaced most other traditional, conventional lighting sources worldwide, particularly all incandescent light bulbs, halogens and CFLs.

This radical change in the lighting of the globe is being impelled by the huge, multi-billion dollar global lighting cartels and companies that manufacture LEDs (supported by an army of scientists, electrical engineers, doctors, marketers and corporate lobbyists who are either directly or indirectly employed by them) and have recently persuaded governments to pass new laws to promulgate LEDs, while gradually banning most other traditional forms of lighting.

While it is largely true LEDs on average consume about 85% less electrical power than incandescent bulbs – they are much more environmentally safer than low energy use compact fluorescent Lamps (CFLs) that contain dangerous levels of mercury – are less of a fire risk than incandescent bulbs or halogens because they operate at cooler temperatures – and generally have a much longer working life and hence are much better for the environment.

What the lighting manufacturers, doctors and scientists are conveniently doing to sell their LED product (and hence are making billions of dollars in the process) is that they are spectacularly lying about the negative characteristics of it, omitting to explain that the UV/BLUE LIGHT in the light spectrum emitted from all white LEDs causes severe macular degeneration of the eyes, and with long-term use will probably send everyone blind.

Unfortunately, severe macular degeneration leading to blindness usually takes many years to fully develop, and at this point of time in 2014, with LEDs still being so new, it is difficult to accurately predict how long this will eventually take or exactly what the final effect will be.

However, already there is an overwhelming amount of factual evidence from medical research produced by honest, independent scientists, eye specialists, doctors and lay people conclusively proving that there are indeed very serious damaging effects to the eyes caused by blue light wavelength radiation emitted from LEDs.

Already numerous scientists have discovered that blue wavelength radiation from white-light emitting LEDs do cause irreparable retina damage in retinal pigment epithelium cells.

In numerous experiments, light exposure from all LED sources increases the percentage of light-induced cell death, especially in cells exposed to white and blue light, which generally record up to a 92% and 94% cell-death increase respectively, depending on exposure. So it's

not a question of if LEDs may severely damage our eyes, but more, when the results of the research will manifest itself and become fully recognised .

Dr Celia Sánchez-Ramos

Dr Celia Sánchez-Ramos, (born in Spain 1959), PhD in Preventative Medicine, Diploma in Optics, and Researcher with the Neuro-Computation and Neuro-Robotics Group of the Universidad Complutense de Madrid, scientist and researcher in the field of Vision Sciences, Tenure Lecturer at the Universidad Complutense de Madrid, has courageously published research material that conclusively proves UV/blue light from the light spectrum emitted by white LEDs causes serious damage to the retina and macular degeneration in rats.

She and her colleagues co-published a stunning study at the XVII International Congress of Eye Research (ICER), Buenos Aires, Argentina, 29 October – 3 November 2006 entitled, "*Light-Induced Changes in the Retina of Albino Rats: Structural and quantitative studies*." In this laboratory study, 24 adult Wistar-Kioto albino rats were divided into three groups of eight animals, and exposed to three different wave lengths of light (White: equivalent to solar radiation; Yellow: Light lacking blue radiation – 50% transmission at 450nm; Blue: Radiation at wave lengths under 500nm – 50% transmission at 446 nm) for 12 hours/day for 15 days. The results from the quantitative analysis of this study were stunning.

What the results of the study emphatically demonstrated was that the blue light caused radical changes in the retinas of the rats. This involved mainly the photoreceptors and neurons. In addition to the retinal changes, the rat's eyes exposed to blue light produced disarrangement of the retinal-choroidal junction with dialation of choroidal blood vessels responsible for indirect retinal damage.

In the *Conclusions* of her study Dr Celia Sánchez-Ramos made this recommendation:

- "The structural retinal changes induced by blue light exposure can be partly prevented by using yellow filters, blocking of the transmission of blue light. This is in agreement with previous data reported in the albino rat using a yellow lens. Therefore, the use of a lens capable to filter blue light might be of interest in the prevention and treatment of age-dependent macular degeneration, retinitis pigmentosa and other retinal diseases."

Following her findings, Dr Sánchez-Ramos filed a number of patents for therapeutic contact lenses for pseudophakic eyes and/or eyes suffering neurodegradation, and her latter design led to her being awarded the "Best Innovation presented by a Woman Inventor of 2009 Prize" by the UN World Intellectual Property Organization.

She emphatically claims that blue and violet light bands in the light spectrum are directly related to the physiopathogenesis of AMD – and that the yellow filter lenses she has developed absorb the blue/violet portion of the spectrum and therefore protect the retina from the harmful effects of these rays.

A summary of Dr Celia Sánchez-Ramos's study presented to the Congress may be seen here: www.celiasanchezramos.com/archivos/investigacion/.../albino-rats.pdf

Of course, mainstream opponents of her study including many leading scientists and doctors in Europe and America either directly or indirectly working for the light bulb manufacturing cartels, including the American Optometric Association, claim her Madrid study is "meaningless," nothing more than a modern fairy tale story about 'The Three Blind Mice' of folklore – inferring that her study was the equivalent of testing someone looking at a 100

watt light bulb at a distance of 12 inches for 12 hours per day, something a normal person would never do.

While theoretically it is true that the eyes of rodents may have some different characteristics to those of humans and the effects of UV/blue light toxicity between the two groups may be quite dissimilar, clearly, other independent studies on humans so far indicate that blue light toxicity is very similar, and hence, Dr Celia Sánchez-Ramos's conclusions are perfectly correct.

More recently, Professor Celia Sánchez-Ramos had some of the results of her studies published in the journal *Photochemistry and Photobiology* in 2012 claiming that LED radiation caused significant damage to human retinal pigment epithelial cells in vitro.

Elaine Kitchel, M.Ed.

Another courageous lady and independent researcher, Elaine Kirchel, a project leader for the American Printing House for the Blind, in her research synthesis, published in June 2000 in the *Journal of Visual Impairment and Blindness* entitled, *The Effects of Blue Light on Ocular Health,* has written an outstanding summary of earlier studies and literature produced by HONEST, concerned doctors and scientists [with references] which all show cumulative exposure to blue light does cause serious damage to the retina of test animals, including humans.

http://www.cclvi.org/contributions/effects1.htm
http://www.aph.org/edresearch/kitchel.htm

In the opinion of this author, considering the early date way back in 2000 that Elaine originally wrote her perceptive report, she was, and still is, well ahead of her time in understanding the toxicity of UV/blue light in relation to the early development of blindness.

Her general conclusions are spot on, and even in the first sub-section of her exposé *'Why should we care about blue light?'* she writes, "For years now, professionals in the fields of light energy and vision have known about the hazards ultraviolet (UV) light presents to ocular health."

Yet today, many thousands of leading scientists and eye doctors try and tell us all LEDs may have some effect on the eyes, but still are not a problem! So somebody is lying! Big-time!

TAIWAN STUDY: White Light-Emitting Diodes (LEDs) at Domestic Lighting Levels and Retinal Injury in a Rat Model

Perhaps the most overwhelming, damning evidence to date (2014) proving that blue light from white light-emitting LEDs causes massive irreversible retinal neuronal cell death in rats – was a recent INDEPENDENT study entitled, *'White Light-Emitting Diodes (LEDs) at Domestic Lighting Levels and Retinal Injury in a Rat Model'* – produced by five outstanding Taiwanese researchers, Yu-Man Shang, Gen-Shuh Wang, David Sliney, Chang-Hao Yang, and Li-Ling Lee.

The study was supported by the National Taiwan University Hospital (grant UN101-036) and the Taiwan National Science Council (grant NSC101-2314-B-002-073-MY2). The study was Received 30 June 2013; Accepted: 19 December 2013; Advance publication: 20 December 2013; Final Publication: 1 March 2014. All authors publicly declared that they had no actual or potential competing financial interests.

In early 2014, their outstanding study was published in *Environmental Health Perspectives* http://ehp.niehs.nih.gov/1307294/ A full PDF version of their study can also be downloaded from this listing. Note: *Environmental Health Perspectives (EHP)* is a monthly journal of peer-reviewed research and news published with support from the National Institute of Environmental Health Sciences, National Institutes of Health, and United States Department of Health and Human Services. The mission of *EHP* is to serve as a forum for the discussion of the interrelationships between the environment and human health by high-quality peer-reviewed research and news from the field. *EHP* receives more than 1,200 research manuscripts each year and has an acceptance rate of about 15%. Permissions and Copyright: (As noted on their Homepage) Publication of *EHP* lies in the public domain and is therefore without copyright.

The results of their compelling, extensive, independent, in depth study are simply overwhelming. Here is a very brief synopsis about it:

"Background: Light-emitting diodes (LEDs) deliver higher levels of blue light to the retina than do conventional domestic light sources. Chronic exposure to high intensity light (2,000-10,000 lux) has previously been found to result in light-induced retinal injury, but chronic exposure to relatively low intensity (750 lux) light has not been previously assessed with LEDs in a rodent model.

Objective: We examined LED-induced retinal neuronal cell damage in the Sprague- Dawley rat using functional, histological, and biochemical measurements.

Methods: We used blue LEDs (460nm) and full-spectrum white LEDs, coupled with matching compact fluorescent lights, for exposures. Pathological examinations included electroretinogram, hematoxylin and eosin (H&E) staining, immunohistochemistry (IHC) and transmission electron microscopy (TEM). We also measured free radical production in the retina to determine the oxidative stress level.

Results: H&E staining and TEM revealed apoptosis and necrosis of photoreceptors, which indicated blue-light induced photochemical injury of the retina. Free radical production in the retina was increased in LED-exposed groups. IHC staining demonstrated that oxidative stress was associated with retinal injury. Although we found serious light injury in LED groups, the compact fluorescent lamp (CFL) groups showed moderate to mild injury.

Conclusion: Our results raise questions about adverse effects on the retina from chronic exposure to LED light compared with other light sources that have less blue light. Thus, we suggest a precautionary approach with regard to the use of blue-rich "white" LEDs for general lighting…

LEDs are expected to become the primary domestic light sources in the near future. Certain amounts of LED light exposure may induce retinal damage, and this animal model provides comparative measures of damage from different commercial light sources. Albino rats are commonly used for retinal light injury experiments (Collier et al 2011).

Retinas from rats maintained in the dark for 14 days are more susceptible to light-induced damage than normal pigmented retinas (Organisciak and Vaughan 2010). Our results show that the SPDs of bluish-white (high CCT) LEDs contain a major fraction of short-wavelength light that causes irreversible retinal neuronal cell death in rats.

Furthermore, this model shows that the SPD of white LEDs now being introduced for domestic lighting pose a theoretical risk compared to CFLs (or incandescent lamps that have little blue light). When analysing blue-light hazards, we cannot exclude the risk of chronic

effects from daily exposure because photochemical damage may not induce an acute syndrome; instead, blue light exposure may cumulatively induce photoreceptor loss.

Regardless of whether the initial damage is caused by a photochemical effect, LED light damage is independent on wavelength and duration. The entire retinal neuronal cell is affected, regardless of whether the injury is localized in the outer segment, mitochondria, or other subcellular organelles. Because illuminance levels of LED domestic light sources may induce retinal degeneration in experimental albino rats, the exact risks for the pigmented human retina require further investigation."

However, excessive blue light from LEDs doesn't only damage the eyes. It also dramatically affects general human health and well-being and this will be addressed in the following chapter.

CHAPTER FIFTEEN

LED BLUE LIGHT:
DANGER TO GENERAL HUMAN HEALTH

Apart from seriously damaging the eye's retina, (which is bad enough by itself), excessive blue light from LEDs also profoundly wrecks the rest of your health as well.

All life on earth is dependent on the light from the sun and moon in just the right proportions to make the lifecycle tick. Exposure to the appropriate spectrum of light during the day and evening enhances human health and wellbeing, immune response and productivity. However, exposure to artificial light sources that do not match the natural solar spectrum to the time of the day or evening, is extremely hazardous to human health. The primary reason visible light has such a powerful effect on human health is that light exposure through the eye modifies the "circadian rhythm" which controls almost all human behaviour and physiology.

The Circadian Rhythm is derived from the Latin words *circa dies* meaning 'approximately a day'. It may be defined as the changes in human behaviour and physiology that occur within a 24-hour period. It has an average cycle of 24.2 hours. Although rarely given the prestige it deserves, it is in fact the 'master biological clock' of the entire human body.

Although the circadian rhythm can be modestly modified by food and temperature, it is still by far the most powerful external stimulus for synchronizing all functions of the body. It operates in unison with the cyclic exposure to the light of day and darkness at night – and it is ALL CONTROLLED THROUGH BLUE LIGHT BETWEEN 460-500nm RECEIVED BY A TINY SPOT IN THE RETINA OF THE HUMAN EYE!

When humans are exposed to a daily dark/light cycle, cyclic production of specific neurohormones and neuropeptides result in changes in sleep and alertness, body temperature and pressure, metabolism and reproduction.

The chromophore that receives this circadian light is melanopsin (Provencio et al., 2000; Panda et al, 2002; Rollag et al., 2003; Hannibal et al., 2004; Foster, 2004). Melanopsin is located in the neural retina in the intrinsic photosensitive Retinal Ganglion Cells (ipRGC) (Bersson et al., 2002; Berson, 2003).

When circadian light impinges on the retina it sends a signal to the SCN in the hypothalamus (Sadan et al., 1984; Takahashi et al., 1984; Klein et al., 1991), leading to a cascade of hormonal changes in the pituitary, pineal, adrenal, and thyroid glands. This is non-visual photoreception.

The absence of circadian blue light in the evening is equally important to the daily oscillation of human hormones (Roberts, 1955, 2000; Eastman and Martin, 1999; Wehr et al., 2001). Different neurohormones and neuropeptides are produced in the presence and absence of circadian light. Circadian light exposure in the morning increases cortisol [stress], serotonin [impulse control], gaba [calm] and dopamine [alertness] levels (Wurtman et al., 1963a, b; Scharrer, 1964; Brainard, 1991; Roberts et al., 1992a; Omura et al., 1993), modifies the synthesis of follicle stimulating hormone (FSH) [reproduction], gastrin releasing peptide

(GRP) and neuropeptide Y (NPY) [hunger] (Inouye and Kawamura, 1979; Inouye et al., 1990; Roberts et al., 1992a), and TSH [metabolism] (Hanon et al., 2008).

Removal of circadian light exposure at night allows for the production of melatonin [sleep], vasointestinal peptide [lowers blood pressure] and growth hormone [metabolism and repair] (Roberts, 1995). Because of these hormonal changes, the circadian dark/light cycle controls and modifies the sleep/wake cycle, blood pressure, metabolism, reproduction and the immune response.

Ref. 22-page study entitled, *Circadian Rhythm and Human Health* by Joan E. Roberts, Department of Natural Sciences, Fordham University, New York City.

http://www.photobiology.info/Roberts-CR.html

So, this is why any artificial light source that does not mimic natural lighting for the time of the day and season is going to incur havoc with general health.

In previous chapters the author described how regular incandescent and halogen light bulbs (now being banned) emit the closest composition of light to natural daylight, and as such are the best artificial light source for human health.

Also, it has been explained that CFLs are heavy on damaging UV emissions, while LEDs are much worse emitting a sharp spike of blue light that damages the retina. But that's not all, too much blue light also damages all general human health.

It gets worse, very much worse!

HARVARD STUDY: LED Blue light suppression of melatonin

In May 2012, Harvard Medical School's *Harvard Health Publications* published an excellent newsletter entitled, ***"Blue light has a dark side."***

http://www.health.harvard.edu/newsletters/Harvard_Health_Letter/2012/May/blue-light-has-a-dark-side/

Here is an extract from what they wrote:

"*Light at night is bad for your health, and exposure to blue light emitted by electronics and energy-efficient light bulbs may be especially so.*

Until the advent of artificial lighting, the sun was the major source of lighting, and people spent their evenings in (relative) darkness. Now, in much of the world, evenings are illuminated, and we take our easy access to all those lumens pretty much for granted.

But we may be paying a price for basking in all that light. At night, light throws the body's biological clock – the circadian rhythm – out of whack. Sleep suffers. Worse, research shows that it may contribute to the causation of cancer, diabetes, heart disease, and obesity.

But not all colours of light have the same effect.

Blue wavelengths – which are beneficial during daylight hours because they boost attention, reaction times, and mood – seem to be the most disruptive at night.

And the proliferation of electronics with back-lit LED screens, smartphones, tablets, computers and TVs, as well as energy-efficient lighting, is dramatically increasing our exposure to blue wavelengths, especially after sundown.

Daily rhythms influenced by light

Everyone has slightly different circadian rhythms, but the average length is 24 and one-quarter hours. The circadian rhythm of people who stay up late is slightly longer, while the

rhythms of early birds fall short of 24 hours. Dr Charles Czeisler of Harvard Medical School showed, in 1981, that daylight keeps a person's internal clock carefully aligned with the environment.

The health risks

Study after study has linked working the night shift and exposure to light at night to several types of cancer (breast, prostate), diabetes, heart disease, and obesity. It's not exactly clear why night-time light exposure seems to be so bad for us. But we do know that exposure to light suppresses the secretion of melatonin, a hormone that influences circadian rhythms, and there's some experimental evidence (it's very preliminary) that lower melatonin levels might explain the association with cancer.

A Harvard study shed a little bit of light on the possible connection to diabetes and possibly obesity. The researchers put 10 people on a schedule that gradually shifted the timing of their circadian rhythms. Their blood sugar levels increased, throwing them into a pre-diabetic state, and levels of leptin, a hormone that leaves people feeling full after a meal, went down.

Even dim light can interfere with a person's circadian rhythm and melatonin secretion. A mere eight lux – a level of brightness exceeded by most table lamps and about twice that of a night light – has an effect, notes Stephen Lockley, a Harvard sleep researcher. Light at night is part of the reason so many people don't get enough sleep, says Lockley, and researchers have linked short sleep to increased risk for depression, as well as diabetes and cardiovascular problems.

The power of the blues

While light of any kind can suppress the secretion of melatonin, blue light does so more powerfully. Harvard researchers and their colleagues conducted an experiment comparing the effects of 6.5 hours of exposure to blue light to exposure to green light of comparable brightness. The blue light suppressed melatonin for about twice as long as the green light and shifted circadian rhythms by twice as much (3 hours vs. 1.5 hours).

In another study of blue light, researchers at the University of Toronto compared the melatonin levels of people exposed to bright indoor light who were wearing blue-light-blocking goggles to people exposed to regular dim light without wearing goggles. The fact that the levels of the hormones were about the same in the two groups strengthens the hypothesis that blue light is a potent suppressor of melatonin.

It also suggests that shift workers and night owls could perhaps protect themselves if they wore eyewear that blocks blue light. Inexpensive sunglasses with orange-tinted lenses block blue light, but they also block other colours, so they're not suitable for use indoors at night. Glasses that block out only blue light can cost up to $80.

Less-blue light

If blue light does have adverse health effects, then environmental concerns, and the quest for energy-efficient lighting, could be at odds with personal health. Those curlicue compact fluorescent light bulbs and LED lights are much more energy-efficient than the old-fashioned incandescent light bulbs we grew up with. But they also tend to produce more blue light.

The physics of fluorescent lights can't be changed, but coatings inside the bulbs can be so they produce a warmer, less blue light. LED lights are more efficient than fluorescent lights, but they also produce a fair amount of light in the blue spectrum. Richard Hansler, a light

researcher at John Carroll University in Cleveland, notes that ordinary incandescent lights also produce some blue light, although less than most fluorescent light-bulbs…"

According to *Psychology Today* May 4, 2012, Dr Luis Arrondo of Foundational Healing, good examples of light sources high in melatonin-suppressing blue light includes:

- LED light bulbs
- Computer monitors
- Laptop computers
- iPads, iPhones and similar devices
- Hand-held video games
- Electronic gadgets
- LED televisions
- LED digital clocks

On 12 September 2011, *Science 20* featured an excellent article titled, *The Dangers of White LED Bulbs.* http://www.science20.com/news_articles/dangers_white_led_bulbs-82532 In it they quoted from a joint study, *Limiting the Impact of light pollution on human health, environment and stellar visibility* by Fabio Falchi, Pierantonio Cinzano, Christopher D. Elvidge, David M. Keith and Abraham Haim, published in *Journal of Environmental Management.* It was conducted by astronomers, physicists and biologists from ISTIL – Light Pollution Science and Technology Institute of Italy, the National Geophysical Data Center in Boulder, Colorado, and the University of Haifa, Israel.

In the study the researchers for the first time examined the differences in melatonin suppression in various types of light-bulbs, primarily those used for outdoor lighting. Next, they compared that information with existing research regarding melatonin suppression to determine the melatonin suppression level of each bulb type.

Taking into account the necessity for artificial lighting in cities, as well as the importance of energy-saving bulbs, the research team took as a reference point the level of melatonin suppression by a high-pressure sodium (HPS) bulb, a bulb that gives off orange-yellow light and is often used for street and road lighting, and compared the data from the other bulbs to that one.

From the comparison it emerged that the metal halide bulb, which gives off a white light and is used for stadium lighting, among other uses, suppresses melatonin at a rate more than 3 times greater than the HPS bulb, while the light-emitting diode (LED) bulb, which also gives off a white light, suppresses melatonin at a rate more than 5 times higher than the HPS bulb.

Accordingly, the researchers said; "The current migration from the now widely used sodium lamps to white lamps will increase melatonin suppression in humans and animals."

Professor Haim recommended; "As a first step in Israel, for example, the Standards Institution of Israel should obligate bulb importers to state clearly on their packaging what wavelengths are produced by each bulb. If wavelength indeed influences melatonin production, this is information that needs to be brought to the public's attention, so consumers can decide whether to buy this lighting or not."

In another article, "*Short wavelength illumination (primarily LED lighting) can result in various illnesses and adverse symptoms* http://engineeringevil.com/tag/light-emitting-diode/ the author quotes from Professor Abraham Haim at the 21st International Congress of Zoology (ICZ) that was held at the University of Haifa, Israel in 2012.

At the Congress, Professor Haim presented one of his studies showing the adverse effects of exposure to light at night – particularly short wavelength blue LED – in the blind mole rat and in seeing rats, both of which showed varying levels of damage to their metabolic rates, hormone production, body mass, and oxygen consumption following exposure to LAN, as well as suppressed levels of melatonin production, which is responsible for tumor growth.

"We expect to find similar results of damage from human exposure to LED lighting," Professor Abraham concluded, and he pointed out that "Western youngsters are typically surrounded by this sort of lighting in the confines of their own bedroom: from the smartphone, computer screen, and television."

Professor Haim's LED study here is not unique, but simply adds to the results of many others all of which prove too much blue light exposure to animals is extremely unhealthy.

CHAPTER SIXTEEN

LED BLUE-LIGHT: SCREEN PROTECTORS & WHAT MANUFACTURERS SAY

Special introductory note: The information provided largely by screen protector manufacturers in this chapter about the UV/blue light/IR hazard produced by LEDs is entirely contrary to the official position of the Global Lighting Association (GLA): http://www.globallightingassociation.org/mint/pepper/tillkruess/downloads/tracker.php?url=http% – that deceptively states in its White Position Paper, *Optical and Photobiological Safety of LED, CFLs and Other High Efficiency General Lighting Sources* that:

1. ***Section 4:1, page 6, Conclusions on blue light emission:*** *"With regard to photobiological safety, LEDs are not fundamentally different to lamps using traditional technologies, such as incandescent or fluorescent (including CFL) lamps. The portion of blue light produced by typical LEDs is not higher than the portion of blue light in lamps using other technologies at the same colour temperature."*

FACT: This statement is deliberately misleading using the term "at the same colour temperature" as the most widely used white LEDs all do have a sharp spike of damaging blue light in their spectral emissions and are entirely different to incandescent and CFL light-bulbs.

2. ***Section 4:1, page 7, Energy efficient lighting and children:*** *"The lens of a child's eye filters blue light less efficiently than an adult's lens. Children are thus more sensitive to blue light hazard. However, it is not necessary that LEDs and CFLs (or blue light in general) should be avoided in an environment with children present, since general illumination products used in homes, offices, stores, and schools do not produce intense levels of blue light. Since such applications have a low surface brightness (intensity) even "pure" blue light is completely harmless, regardless of whether it is the blue produced by LEDs, CFLs or other common residential light sources, or the blue light found in sky light."*

FACT: This statement is blatant, deliberate lie. Excessive amounts of blue light, is in fact extremely dangerous to young children.

3. ***Section 4:2, page 8, Conclusions on ultraviolet radiation (UV):*** *"LED based light sources used by the general public typically do not emit any UV radiation. CFLs and other fluorescent lamps emit only a very small amount. Since LEDs emit no UV, they are particularly well suited for use by people with a specific sensitivity for certain UV radiation and can bring relief to certain groups of patients. In this respect, LED based light sources provide advantages over traditional incandescent, halogen and Compact Fluorescent lamps."*

FACT: These statements are plain lies. LEDs do emit UV.

4. ***Section 4:3, page 8, Conclusions on infrared radiation (IR):*** *In contrast to most other light sources, e.g. halogen and incandescent lamps, LEDs and CFLs used for general illumination emit very little IR."*

FACT: This is not entirely true, LEDs do emit IR.

Remember, the Global Lighting Association represents over 5000 multinational companies, trillions of dollars in assets, millions of employees, executives, scientists and doctors – who are all complicit in one way or another in perpetrating these spurious lies.

What is so tragic, most governments, including the EU and UN, whether knowingly or unwittingly, have subsequently ratified these false GLA statements – and unhesitatingly introduced these lies straight into their new lighting legislation as the result of intense corporate lobbying from GLA 'mafia' members.

Example Manufacturer No.1: NoUVIR Lighting

http://www.nouvir.com/index.cfm?ref=10100

This company name, NoUVIR Lighting, stands for "No UV" and "No IR." No Ultraviolet and No Infrared. This unique company specializes in manufacturing and supplying "NoUVIR" pure-white fiber-optic light with absolute control over aim, focus and intensity to museums, art galleries etc. – to protect historical paintings, documents and artefacts from photochemical damage.

It was founded early in the 1990s when Ruth Ellen Miller, a Magna Cum Laude business graduate with a post graduate teaching credential in Art and Design, and her father, Jack Miller, a scientist and optical engineer with well over one hundred U.S. patents, became concerned about photochemical damage to America's art and historical artefacts which were fading almost to the point of becoming illegible.

What they felt was needed was new science and a new system of illumination. After three years of intense study, starting with the work of Einstein, Feynman and others, they developed seventeen US Patents in fiber-optic lighting and developed a new lighting system capable of almost eliminating photochemical damage, and these are the sorts of products they supply today.

Not long ago, they published an excellent article on their website about LEDs entitled, ***"Don't Be LED Down The Garden Path."***

http://www.nouvir.com/index.cfm?ref=90200&ref2=9

The following are a few extracts taken from this article:

"… Just so you know where we're going with this series, LEDs are great for a lot of things. Unfortunately, lighting art and artefacts isn't one of them. For low-voltage, intermittent use, monochromatic color (RGB or even Y), or long life, LEDs can't be beat. But they don't do so well where color rendition is important or UV is a problem… UV free fluorescents are not possible. While more phosphor means better color, it also means less efficiency. Make the phosphor coating thick enough to absorb all the UV, and the outside layer stays dark. You don't get any light out.

For exactly the same reasons you can't make a "white" LED without a strong monochromatic color component (usually blue) overriding the phosphor emissions… Besides making things look bad, blue is exactly the wrong color for preservation in a museum or archive. Blue light isn't reflected by the yellows and browns of parchments, faded textiles or ancient artefacts. It is absorbed. It doesn't aid vision. It increases damage. That is why the National Archives (NARA) set a 500nm cut off for light sources for charter documents.

Hearing a lot about "white" LEDs? So are we. And some of what we're hearing just isn't true. Especially LED claims about UV and IR. So, let's look at some actual LED test data and

separate the science from the science fiction. We started this series with a spectral power distribution for a typical “white” LED… LEDs have a blue spike at 450nm and a lower phosphor curve centered around 560nm. Phosphors, manufacturers, beams and color temperatures may vary slightly. But, the basic curves remain the same.

The problem is, lighting manufacturers tend to limit their data to the visible range. Until recently UV and IR were not considered problems. Then they either extrapolate (believe without testing) that the data continues along the same curves, or if they know better, they let you believe that the data continues along the same curves. The fact is that it doesn’t. The low points at the end of the visible range are not the tail ends of the LED spectral outputs, they are simply low points (valleys) in the data. You need to know that significant UV and IR output matches that of a steam radiator.

To be fair, we found no measurable UV in the long wave 300-380nm range. That this is the only UV that most museum quality UV meters measure may just be a coincidence. Regardless, there is a big difference between no long wave UV and no UV at all. (That’s why the government sets UVB filtering standards for sunglasses.)

The photo above [author’s note; see link above] shows a UVX Radiometer using a 200nm-300nm head (UVB and UVC) in the actual testing of a major brand “white” LED luminaire. The meter shows a UV output of 3.8”W/cm2 for their “cool white” LEDs. The spectral power distribution from the manufacturer’s website shows peak output for this LED to be roughly the same intensity, 3.7”W/cm2. Their “warm white” LEDs show even worse results, a peak output of 1.9”W/cm2 and a short wave UV output of 2.9”W/cm2. The bottom line is that these fixtures put out as much UV as they do blue light.

All LEDs also emit IR. As a matter of fact, heat dissipation is a major factor in LED design and LED life. While manufacturers may say stupid things like, “all thermal energy is conducted through the housing and not radiated in the beam,” the fact is that LED luminaires stabilize around 50°F above ambient temperature. The whole unit radiates IR. No object that radiates heat can be considered IR free. Despite some manufacturer claims, LED sources are not UV and IR free. Their high short wave UV output makes them particularly dangerous for art and artefacts. Without significant secondary UV filtering LEDs are not acceptable light sources for fugitive or fragile materials and do not meet IESNA guidelines for museum lighting.”

Example Manufacturer No.2: TechArmor

http://www.techarmor.com/screen-protectors/retina-shield/tech-armor-ipad-air-retina-shield-blue-light-filter-screen-protector-with-lifetime-replacement-warranty-retail-packaging.html

TechArmour manufactures a range of *RetinaShield* Blue Light Filter Screen Protectors for smartphones, tablets and iPads to protect against the damaging effects of blue light from these devices.

More details about them and why they consider they are necessary are on their website. A short YouTube review of their iPhone 5 *RetinaShield* Blue light Filter Screen Protector is here: http://www.youtube.com./watch?v=jURAGXmqK2k

Example Manufacturer No.3: Sleepshield

http://www.sleepshield.com/

This company produces a whole range of blue-light filter screen protectors.

Example Manufacturer No.4: Cooyee

http://www.youtube.com/watch?v=JhqLam1Xoj4

This company advertises its anti-blue-light screen protectors to prevent 380nm – 420nm high-energy short wave blue light from injuring the eyes and deepening myopia.

Example Manufacturer No.6: Prisma Products

http://www.bluelightprotect.com/prisma-products/index.html

This outstanding German company produces an extensive range of top-class yellow/orange-tinted (and other tints as well) quality UV/blue-light protection glasses, goggles, spectacles and clip-ons for a wide range of specific applications.

Here is a short extract from what they perceptively say:

"**A danger to the retina?** A person doing on-screen work looks directly into the source of light for a long time. This means that the radiation hits – unfiltered and bundled – on the spot of the sharpest vision, the so-called macula lutea, also called the "yellow spot" which is located on the back wall of the eyeball. The lens filters ultraviolet light, blue light is not. This proportion of blue light can, in the long term, lead to damage such as age-related macular degeneration (AMD), an incurable disease of the yellow spot. Numerous scientific studies on AMD have proven that blue light can be harmful to the eye. Oxygen radicals damaging cell metabolism in the eye are produced under the influence of blue light…"

"Brightness control offers no protection: The brightness control of a screen works through pulse width modulation regulating the on-time of the source of light in a certain frequency. Even when reducing the brightness of the screen the pauses between the impulses indeed become longer, but the power of the impulses is not reduced. Therefore the light impulse always penetrates the body tissues to an equally deep level, even when the eye perceives a lower brightness caused by frequency modulation. Pulsating signals can disturb the biological balance even more than permanent signals. TFT screens only cease to flicker when turned on fully. That is why it is recommendable to turn the screens on fully and wear special Computer Protection Glasses from Prisma."

"**Protect your eyesight!** In order to protect eyes from mechanical and chemical danger it is necessary and normal to wear protection glasses. But the danger caused by unprotected work at screens and under fluorescent lamps is often played down or denied by orthodox medicine although the above-mentioned damaging mechanisms have already been proven in cell experiments. Who wants to wait until – maybe only in many years from now – orthodox medicine research delivers the final proof? If you already want to protect yourself today, we recommend you to wear Prisma Computer Protection Glasses as a precaution."

http://www.bluelightprotect.com/information/bluelightprotect-why/index.html

Example Manufacturer No.7: Guangzohu Lehman Brothers [Electronic Technology]

X.One owned by Guangzohu Lehman Brothers currently market a range of UV/blue light screen protection film called *Blue Light Cut* for a whole range of devices including iPhones, iPads, tablets, TV screens and computer monitors. The video on their website is well worth a watch: http://www.x-one.cn/EN/aspcms/product/2013-11-26/261.html

Summary:

The Global Lighting Association emphatically claims there are NO DANGEROUS blue Light emissions with all LED products. Then why do you think these high quality, specialist

companies are manufacturing “blue light” eye protection glasses and screens to filter out the damaging blue light from LED products??? Huh???

It obviously has never occurred to the LED light manufacturers [Mafia] (with their subservient, sleazy doctors and scientists) that their lies would be so quickly refuted by other optical professionals who have immediately recognized the blue light hazard and are at least trying to protect the public from it.

Be they as they are, the UV/blue-light protection companies are businesses also as well, and they potentially could be the same as the light-bulb manufacturers themselves in dishonestly promoting their products. However, a brief phone call to any of them will reveal how *passionately* they believe and understand why there is the dire need for their product.

Truly, one would have thought the LED manufacturers could have come up with a better fairy-tale or line of LED pig manure than they eventually have – given that even any first year kindergarten child could see through it? But no – they still obstinately hold to their position and continue to perpetuate their lies – while showing that their insatiable greed and economic interest is paramount only to be exceeded by their interminable contempt of others!

CHAPTER SEVENTEEN

EYE CHECK-UPS, OPHTHALMOLOGISTS, & LED RETINAL LIGHT DAMAGE

Eye check-ups: a double-edged sword

Many people who are concerned about their health go to an eye professional or ophthalmologist every six months or once a year to have an annual routine eye check-up. During the tests, as part of the physical examination, an **ophthalmologist** [a specialist in medical and surgical eye problems] will often use an **ophthalmoscope** that emits a bright light to look inside the eye to determine the health of the retina and vitreous humor – or he may use a **slit lamp** to examine the eye, which is a low-power microscope combined with a high-intensity light source that can be focused to shine in a thin beam.

These eye tests are performed to examine the conjunctiva, cornea, eyelids, iris, lens, sciera and to look for abnormalities or diseases such as cataract, corneal injury, dry eye syndrome, macular degeneration, retinal detachment, conjunctivitis, diabetic retinopathy, Fuchs' dystrophy, keratoconus, retinal vessel occlusion, retinitis pigmentosa, uveitis, toxoplasmosis, Wilson's disease and many others. The tests can evaluate early symptoms of retinal detachment or eye diseases such as glaucoma, which if recognised early enough can be treated. In patients with diabetic retinopathy, for example, if discovered early enough, visual loss due to diabetes can be prevented by retinal laser treatment if retinopathy is spotted early. So there are good arguments for having regular eye examinations, especially as you get older.

The problem is that the examination itself, by UNNATURALLY shining intense bright light like this straight into the interior of the eye may itself be causing irreparable damage to the retina. In the last two or three years, as new ophthalmoscopes and slit lamps have come onto the market replacing halogen bulbs with super-bright white LEDs emitting damaging blue light used by ophthalmologists, this only makes matters a lot worse and much more serious.

Ophthalmoscopes

A *direct ophthalmoscope* is an instrument about the size of a torch that has a bright light in it with several lenses that can magnify up to about 15 times, and it is the most commonly used instrument during routine physical examinations. Its invention goes back to Dr William Cumming in 1846 at the Royal London Ophthalmic Hospital (later Moorfields Eye Hospital), who in his pioneering work wrote "every eye could be made luminous if the axis from a source of illumination directed towards a person's eye and the line of vision of the observer were coincident." Some of the credit for its early development also goes back to Charles Babbage in 1847, but it was not until 1851 that Hermann von Helmholtz independently reinvented it when its usefulness was to revolutionize ophthalmology.

While today ophthalmologists claim that eye examinations with modern ophthalmoscopes and slit lamps are not at all a danger and do not harm the eye, the reverse may be true. Indeed, the conversion from halogen bulbs (which have been used for many decades now), to LEDs will be making the situation very much worse.

Retinal light exposure from ophthalmoscopes, slit lamps, and overhead lamps: An analysis of potential hazards www.iovs.org/content/19/9/1009.full.pdf

A study and report called *'Retinal light exposure from ophthalmoscopes, slit lamps, and overhead surgical lamps: an analysis of potential hazards'* by Joseph L. Calkins and Bernard F. Hochheimer was published in 1980. In the very conclusion of their report they write: "We urge manufacturers to design safe surgical illuminators, hopefully with a "safe time" of 45 to 60-min. Subtracting the especially hazardous portions of the blue spectrum and the unnecessary infrared spectrum will be a great help. Diagnostic instruments could hopefully be filtered as well. The primary impetus should come from the ophthalmologist in restricting nonessential light exposure, especially to the macula."

While most physicians underplay the potential damage that can occur through ophthalmoscope and slit lamp examinations, most manufacturers do not. There are many manufacturers. Here is one example of a relatively well known ophthalmoscope made by manufacturer, Welch Allyn, Inc. www.medicalsupply.gr/dat/C29454C1/file.pdf called a 'PanOptic Ophthalmoscope.' This is what the company includes in its *Operating Instruction Manual* about this PanOptic Ophthalmoscope sold to many doctors and ophthalmologists.

- "**Warnings and Cautions**
- CAUTION: To minimize lamp housing temperatures, on-time should not exceed 2 minutes with off-time not less than 10 minutes.
- CAUTION: No acute optical radiation hazards are identified for ophthalmoscopes. However, Welch Allyn recommends limiting the intensity of the light directed into the patient's eye to the minimum level that is necessary for diagnosis. Infants, aphakes, and persons with diseased eyes are at a greater risk. The risk is also increased if the examined person has had any exposure with the same instrument or any other ophthalmic instrument using a visible light source within the previous 24 hours. This will apply particularly if the eye has had exposure to retinal photography. The intended use of this device is for routine ophthalmic exams on the order of typically less than 60 seconds per eye. Although there is a benefit versus risk factor in any medical procedure, these more complicated exams should not exceed a three minute exam time in 24 hours. Significant use of this device beyond its intended use is not recommended; it may cause harm to the eyes. Use only PanOptic Patient Eyecups (part number 118092) with this product.
- CAUTION: Federal law restricts this device to sale by or order of a physician.
- CAUTION: Spectrally weighted photochemical radiance Lb and La give a measure of the potential hazard that exists for a beam of light to cause photochemical damage to the retina. Lb gives the measure for the eyes in which the crystalline lens is not in place. La gives the measure either for eyes in which the crystalline lens has been removed [aphakes] and has not been replaced by a UV-blocking lens or for the eyes of very young children."

Clinical light damage by indirect ophthalmoscopy

Damage induced by light has been a topic of great concern among ophthalmologists and visual scientists for years, although rarely publicized in the media. This article here describes a patient who had serious light-induced damage after clinical ophthalmoscope examination: http://www.nejm.org/doi/full/10.1056/NEJM199311113292020 At the conclusion of their article, they write:

"Exploring the ocular structures with an ophthalmoscope is generally a safe procedure, but it should be done cautiously, particularly in patients with myopia, albinism, glaucoma,

ischemia, or poor nutrition. Under those circumstances the use of an instrument with a lower level of light, such as a scanning laser ophthalmoscope, a direct ophthalmoscope, or an ophthalmoscope with protective filters, may be indicated."

Slit lamps

A slit-lamp is a lower power binocular microscope combined with a high-intensity light source that can be focused to shine a thin beam of light into the eye. It is used for much the same reasons as a ophthalmoscope, but is usually much more powerful and precise. Often a patient will sit in a chair and be asked to rest the chin and forehead on a support to keep the head steady while the health care provider will examine the eyes.

Often a yellow dye (fluorescein) is used to help examine the cornea and tear layer. The dye is either added as a drop, or the health care provider may touch a fine strip of paper stained with the dye to the white of the eye to achieve the same result. Next, drops may be placed in the eye to widen (dilate) your pupils, so that after a short waiting period the back of the eye can be examined. Ophthalmologists call this procedure Biomicroscopy.

During this examination, Cycloplegics such as Astropine (drugs that ophthalmologists use to paralyze the cillary muscle temporarily and also cause the pupil to dilate) are used. Mydriatics are drugs that are used just to dilate the pupil, such as Cyclopentolate. The use of these drugs has become commonplace, yet their toxicity and adverse health effects have been known and criticized for years. http://www.myopia.org/dilatingdrugs.htm

Because of this, some ophthalmologists prefer to use a device called a scanning laser ophthalmoscope to examine the retina without dilating the pupil.

Slit lamp bulbs

For decades most slit lamp manufacturers have used 6 volt 20 watt halogen bulbs for the primary light source in their equipment. The Osram 64250 (FHE/ESB) Microscope HLX Halogen 6 volt 20 watt Light Bulb has been one of the most common. It produces exactly 480 lumens of light.

http://www.specialityoptical.com/osram64250fheesbmicroscopehlxhalogenlightbulb6volt20watt.aspx

There are many slit lamp manufacturers around the world, with a big difference in the quality of the product. However, two of the oldest, most prestigious manufacturers are Haag-Streit in Switzerland and Keeler Limited in UK.

Haag-Streit Holding AG: Was founded in Bern, Switzerland, in 1858, by Friedrich Hermann and Hermann Studer making precision instruments – after a change of location the company began in 1876 to develop and manufacture instruments for ophthalmology. After various changes of ownership, in 1925 the company was given the name *Haag-Streit.* Today it has about 1000 employees with turnover US$200-300 million and is based in Koniz, Bern, Switzerland. The company is a leading global provider of instruments and medical-practice equipment for ophthalmologists and opticians. For more than 50 years the Haag-Streit Slit lamp has been regarded as the standard instrument for ophthalmic diagnosis. http://www.haag-streit.com/company.html

So what is the most current Haag-Streit "standard instrument" slit lamp for ophthalmic diagnosis? It is now been modified into an LED-powered slit lamp, that is, almost unbelievably, quite probably going to destroy patients' retinas with intense blue light! Don't believe it? Well, do have a quick look at the advertisement on their own website;

http://www.haag-streit.com/products/slitlamp/slit-lamp-accessories/led-illumination.html
The following is what their advertisement claims:

- "LED Illumination – Sharper than a razor blade: The new LED powered slit lamp delivers our sharpest, and most homogenous slit ever. The light spectrum is specially designed for Haag-Streit to fulfil the high quality standard and matches the well established tungsten light. This ensures *best details* in diagnosis from the cornea to the retina.
- Brightest and most homogenous powered slit
- Lasts a lifetime – no more bulb change
- Imaging ready – all in one slit and background illumination
- Ergonomic – combined slit and background illumination control
- Available for the Haag-Streit Slit Lamps BQ-900, BM 900 and BP 900
- You will love it, it's a Haag-Streit!"

You'll love it alright. It may end up, ultimately, blinding all patients! Previously, most optical engineers and ophthalmologists knew the output of a 6 volt 20 watt halogen microscope bulb was about 480 lumens. But what is the intensity and spectral characteristic of the LED replacing it? We are not told. This is remarkable. Is it 500 lumens? Or, maybe it is 1000 lumens? Or, even 2000 lumens? This state of affairs is really is totally outrageous for such a precise, delicate, and potentially damaging ophthalmic instrument!

Today Haag-Streit Holding Ag has only four shareholders and the Chairman and CEO, is Walter Inabnit. Inabnit also serves on the Advisory Board of private equity BV Group AG, listed on the Berne Stock Exchange.

BV Group AG was founded in 1997 under the name 'BERN-VENTURE LIMITED' based in Tortola in the British Virgin Islands [tax haven], and later in 2001 listed as a stock corporation under Swiss law with headquarters in Bern when it was renamed BV Holding AG.

It generally targets medical related companies financing. The major shareholder is Willy Michel, a Swiss entrepreneur of medical devices. He is the owner of several companies involved with art, the watch industry, catering, pharmaceuticals and hotels. In 2012, the *Business Magazine* estimated his assets at 750 million Swiss francs.

Question: Haag-Streit is now a big company controlled by only four people. With its Chairman and CEO, Walter Inabnit, involved in BV Group AG, a big, private equity company in Switzerland controlled by Willy Michel – So what do you think motivates the company's executive personnel to sell their products – money? – or a heartfelt desire to tell the truth?

Keeler Limited: Keeler Limited was formed around 1920 after American-born Charles D Keeler opened his first practice at 47 Wigmore Street in London in 1917 supplying high-quality dispensing services and spectacles to the patients of ophthalmologists.

It is one of the oldest leading manufacturers of slit lamps in the world. Today it is headquartered at Windsor UK. It was one of the first manufacturers of medical, dental and ophthalmic equipment, and is a world leader in the field. http://www.keeler.co.uk/

In 2002, the company replaced halogen bulbs with Xenon bulbs in its new Professional Ophthalmoscope. In 2003, it introduced its first 'wireless' indirect ophthalmoscope. In 2005 it introduced two new dental products, the Hi-Res Loupe and KEE-LED based on LED illumination. In 2007, it launched the new LED powered Spectra Plus binocular indirect

ophthalmoscope. In 2008 it launched the world's first headband LED-powered wireless Binocular Indirect Ophthalmoscope called the *Vantage Plus LED*.

In 2013, Keeler launched its first Desktop Slit Lamp called the *Symphony*. The technical specifications of Keeler's *Symphony Model Q Series 40H Digital* slit lamp are here: http://www.keeler-symphony.com/technical-specification

Now if you look closely at the technical specifications under sub-heading 'Slit Projection System & Base' you will see that the fixation lamp is LED and the primary light source is supplied by either a 6 volt 20 watt Halogen lamp or an LED. No ratings for the LEDs are even mentioned.

As previously noted above, an Osram 6 volt 20 watt microscope halogen emits 480 lumens and this is probably the type of halogen they use, so it would take about a 6 volt 3 watt LED to replace it. But we are not told.

Exactly what type and how powerful is the LED bulb that they use? This is so critically important, but it is, quite unbelievably, not even mentioned.

This means that all physicians and ophthalmologists throughout the world who now purchase and use this leading brand global manufacturer's ophthalmic equipment with the LED light-bulb in it, do not even know the basic specifics of the radiation intensity or damaging blue band spectral characteristics of the light they are blasting into their patient's delicate eyes.

DO you understand?

CAN you see the double-edged sword???

How "bright" intellectually do you really think your highly trained, trusted ophthalmologist or medical doctor really is? When he doesn't even know or care about rectifying elementary basics like this. That potentially, even itself could easily send a patient blind?

Would you trust him?

What do you think primarily motivates him as a good family man, highly educated, reputable ophthalmic physician or specialist?

A genuine desire to help humanity and sincerely serve the long-term best interests of all his patient's delicate eyes – or rather, fulfil a greater, deep-seated ambition imparted to him from university, equally shared with his pharmaceutical and light-bulb alumni, to be profoundly inspired by that seductive, almost illusive, Roman goddess, Juno Moneta, to quietly work towards having the most prestigious plot on the beach front and have a big gin palace in the marina?

Granted, these denigrating allegations here against the medical fraternity's ethics in general may seem a little bit "unfair" or "harsh" for many. Well, after the next chapter, perhaps, the reader might just change his mind, and feel the author here is being far too kind!

CHAPTER EIGHTEEN

LEDS AND CATARACT SURGERY

Cataracts

A cataract is a clouding of the lens of the eye that can impair vision. This clouding of the lens can cause a decrease in vision and may eventually lead to blindness if not treated.

The eye functions much like a camera. Light rays enter the eye, passing through the cornea, the aqueous humor – transparent fluid in the front of the eye – and then through the pupil and into the lens. The lens bends the light rays to focus objects onto the retina lining the back of the eye. From there, the image passes through the retinal cells, into the optic nerve, and finally to the back of the brain which processes the images.

Cataracts occur when there is a build-up of protein in the lens that makes it cloudy. This prevents light from passing clearly through the lens, causing some loss of vision. Since new lens cells form on the outside of the lens, all the older cells are compacted into the center of the lens resulting in the cataract.

Cataract types

There are many types of cataracts including, age-related cataracts (aging is the most common cause), congenital cataracts (babies can be born with cataracts or they may develop through childhood), secondary cataracts (these develop as the result of a medical condition, like diabetes, exposure to toxic substances, certain drugs such as corticosteroids or diuretics, ultraviolet light especially UV-B or forms of ionizing radiation such as X-rays) and traumatic cataracts (can form after injury to the eye).

Other factors that can increase a person's risk of developing cataracts include poor diet, cigarette smoking, air pollution, heavy alcohol consumption. Other occupations such as welders or airline pilots have a high risk. Electric and heat related injuries can denature and whiten the lens as the result of direct protein coagulation similar to the process through which the clear albumin of an egg becomes white and opaque after cooking, and these types of cataracts are often diagnosed in the eyes of glassblowers and furnace workers.

There is no medical treatment to prevent the development or progression of cataracts. Modern cataract surgery is the removal of the cloudy lens and implantation of a replacement artificial clear intraocular lens (IOL) in its place. It is the only accepted treatment for cataracts today.

Cataract surgery is the most effective and most common procedure performed in all of medicine.

Cataract statistics

More than half of all Americans age 65 and older have cataracts in one form or another. According to *Statistic Brain*, http://www.statisticbrain.com/cataract-statistics/ as at 28 July 2013, there were 20.5 million Americans and older affected by cataracts, with 50% of Americans age 80 and older having cataracts. The annual amount spent by the US federal government to treat cataracts through Medicare was $3.4 billion, the average cost of cataract surgery per eye was US$3,279, the number of Americans who have cataract surgery

each year is 3 million, the rate of success of cataract surgery is 98%, and the percentage of patients who had no severe postoperative complications is 99.5%.

According to the UN World Health Organization (WHO) there are an estimated 45 million blind people and 135 million visually impaired worldwide, around 90% of people who are blind live in developing countries. Cataract is the leading cause of blindness in the world – in 1998 an estimated 20 million people were blind due to cataract.

Globally, the need for cataract operations is at least 30 million per year, but only around 10 million cataract operations are performed annually (Foster A. Cataract – a global perspective: output, outcome and outlay. *Eye* 1999; 13:65-70).

Around 50% of blindness in sub-Saharan Africa is due to a cataract, and there are an estimated 300,000 blind children in Africa. (Lewallen and Courtright. Blindness in Africa: present situation and future needs. Br. J. Ophthalmol. 2001 Aug; 85(8):897-903). Africa has one ophthalmologist per one million population. (Sommer, A global Health, Global Vision. Editorial. Arch Ophthalmol. 2004 Jun; 122(6):911:2).

Airline pilots and cataracts

In 2005, an article in *Archives of Ophthalmology* included parts of a study prepared by researchers at the Preventative Medicine Department of the University of Iceland which showed airline pilots were three times more likely to have nuclear cataracts than non-pilots. (Nuclear cataracts are the most common type of cataracts).

The study included 445 men, 79 of whom were commercial pilots. Most participants didn't have nuclear cataracts, but 79 men did. Taking everything into account, the pilot's odds of getting nuclear cataracts were tied to their years as pilots and their cumulative radiation dose. Exposure before age 40 had the biggest impact. http://www.webmd.com/eye-health/cataracts/news/20050808/cosmic-radiation-may-up-cataracts-pilots

The intensity of UV radiation (and probably blue-light as well) increases by about 4% per 1,000 feet of altitude, so it is vitally import that airline pilots wear quality protective lenses. It's a complex issue, because polarised lenses are usually unsuitable as some aircraft windscreens are already polarized and some LCD displays emit polarised light which can dim or disappear if viewed with polarised sunglasses. In general, appropriate neutral grey filters are recommended for flying, that filter out 100% of UV-A, UV-B and UV-C, but the problem is that most don't filter out the excessive damaging blue light.

Yellow tints filter out blue light and that needs to be filtered out as well, because in many respects it is even more damaging than UV. But yellow tints particularly can alter colour perception not good for pilots. Flying over sand, water or snow increases UV exposure as UV is reflected. Generally speaking, excessive UV exposure causes cataracts, but excessive blue light exposure seriously damages the retina. Pilots need to be very careful to select the most appropriate protective lenses to suit their specific requirements and application, but the decision is not easy.

In July 2007, a study was published by the US Federal Aviation Administration *'Optical Radiation Transmittance of Aircraft Windscreen and Pilot Vision.*

http://www.docstoc.com/docs/114210435/Optical-Radiation-Transmittance-of-Aircraft-Windscreens-and-Pilot

This study proved in the samples tested, that all screens allowed the transmission of high intensities of UV and blue light emissions into the cockpit. In fact, most screens filtered out virtually none of the blue light in the spectrum at all.

Intraocular lens (IOL)

An intraocular lens (IOL) is an artificial lens implanted in the eye used to treat cataracts or myopia (short sightedness). Sir Harold Ridley was the first to successfully implant an intraocular lens on 29 November 1949 at St Thomas' Hospital in London. The most common type of IOL is the pseudophakic IOL. This is implanted during cataract surgery to replace the cloudy crystalline lens (cataract) after it has been carefully removed.

Today there are a huge variety of lenses that can be used by cataract surgeons to help their patients, and there are equally huge debates between ophthalmic surgeons themselves as to which IOLs are best. A big debate exists over whether crystal clear lenses or UV / blue-blocking IOLs are best. This includes honest ophthalmic surgeons who genuinely want the best outcomes for their patients. It is a complex and controversial issue.

However, these debates are going to become even much more controversial and intense in the future because of the world's rapid transformation toward LEDs with their pronounced "blue light spike" in their spectral emissions. In a sense, lighting technology is racing ahead of medical science which is struggling to keep up.

Once again, it is a double-edged sword issue. There are pros and cons with both arguments. The following is a brief summary of the two opposing points of view which may help people reach their own conclusion as to which type of IOL is best, particularly in respect of the proliferation of LED lighting which is going to have a big effect. The author has tried to be as impartial as possible in presenting both points of view. It is an important issue.

The case for blue-blocking IOLs

Recently, an article entitled *'High Energy blue light filtration: An evidence-based assessment,'* was published in *EyeWorld,* the newspaper of the American Society of Cataract & Refractive Surgery.

http://www.eyeworld.org/ewsupplementarticle.php?id=295

This article largely featured statements by Miguel N. Burnier Jr., M.D.., professor of ophthalmology, pathology, medicine, and oncology, McGill University, Montreal, Canada. The article noted;

"Innovations in IOLs are seemingly endless. Whether you chart the progress from monofocal to multifocal technology or silicone to acrylic material, we live in a world in which cataract patients are better off today than yesterday. Without a doubt, that progress continues with adding a protective chromophore to the lens to achieve wonderful health benefits, according to Miguel N. Burnier Jr…

"Yellow is the gold standard," Dr Burnier said. Yellow is the color that prevents blue light toxicity and concomitant problems," he said. "if cataract patients don't get a yellow lens, such as the AcrylSof IQ IOL (Alcon, Fort Worth, Texas) or the AcrySof Natural IOL (Alcon), their eye health – and much more – is in jeopardy," Dr Burnier said.

"Over the lifetime of each patient, the retinal pigment epithelium [RPE] accumulates the fluorescent material called lipofuscin," Dr Burnier explained. "Blue light absorption by the lipofuscin generates substances which are toxic to the RPE. As a result, RPE cells die and no longer nourish the retina, affecting vision."

"Age-related macular degeneration clearly could result under such circumstances," he said. "Putting excellent vision aside for the moment, consider life-threatening consequences of blue light toxicity, like uveal melanoma. Laboratory rats exposed to long-term blue light develop intraocular masses, pathologically diagnosed as ocular melanoma," Dr. Burnier said.

Further, Dr Burnier cited a study linking high energy light emitted from commercial welding to uveal melanoma. "There was evidence implicating welding as a risk factor for uveal melanoma," Dr Burnier said. But he added that there is a high emission of blue light in arc welding.

In a letter to the journal Ophthalmology, Dr Burnier wrote, "There is evidence suggesting that the major culprit is not ultraviolet light but blue light exposure. Okuno et al evaluated various light sources for blue light hazard. Among these sources, arc welding was found to have extremely high effective radiance, with corresponding permissible exposure times of only 0.6 to 40 seconds, suggesting that viewing this light source is very hazardous to the retina."

Dr Burnier added that using UV and blue light filtering IOLs should be preferred for all adult patients undergoing cataract surgery, as it could be a preventative measure against possible blue light-induced malignant transformation.

Critics of the AcrySof Natural IOLs have incorrectly suggested that the AcrySof Natural "blocks" blue light. They have suggested that blocking blue light could interfere with natural circadian rhythms regulated by melatonin and negatively impact sleep patterns and mood levels. The AcrySof Natural IOLs filter only a specific range of very high-energy blue light. A patient satisfaction questionnaire used at McGill, under the oversight of Dr Burnier's research team, found some enlightening results that all ophthalmologists need to know. Of 360 AcrySof Natural patients answering questions related to quality of vision after cataract surgery, none said they experienced insomnia or depression after cataract surgery.

"There is no definitive evidence to justify statements that the AcrySof Natural chromophore causes alleged problems with visual acuity, color perception, contrast sensitivity, circadian rhythms, or sleep pattern. These and other criticisms are shallow," Dr Burnier said, "such as those related to glistenings."

"The bottom line is that AcrySof blue light filtering technology is not only beneficial to vision, but can prevent serious life-threatening conditions," Dr. Burnier said. "There are strong indications that blue light filtering IOLs may play an important part in preserving vision for the long term. For all these reasons, surgeons must use the gold standard in cataract surgery: Alcon blue light filtering IOLs," Dr. Burnier said.

Dr Burnier claims he has no financial interests related to this supplement. He can be contacted at 514-843-1544 or Miguel.burnier@mcgill.ca ."

For more in depth information about Professor Burnier's studies relating to why he specifically recommends Acrysof Natural (SN60AT) blue-light filtering IOLs see: www.crstoday.com/PDF%20Articles/0108/0108_insert.pdf *"Blue-Light Filtration: Evidence-Based Assessment" (January 2008).*

Special Note: although Professor Burnier claims he has no financial interests in Alcon Laboratories Inc., the company funded this study. Also, there were two other participants in the study assisting Professor Burnier Jr. The first, Richard E. Braunstein, MD, is the Miranda Wang Tang Clinical Associate professor at the Edward S. Harkness Eye Institute at Columbia University, as well as Director of the Division of Refractive Surgery and Chief of the Anterior

Segment Division at Columbia University, New York. He is a member of the Alcon Speakers Bureau, but of course, he acknowledged no direct financial interest in the company or its products. The second, James P. McCulley, MD, FRCOphth, is the David Bruton Jr. Chair in Ophthalmology and a professor of ophthalmology at Southwestern Medical School, UT Southwestern Medical Center, Dallas. He is a consultant for Alcon Laboratories, Inc., but of course, he too, acknowledged no financial interests in the company or its products.

Another similar article entitled*, Clinical Update: Cataract – 'Back-and-Forth controversy on Blue-Filtering IOLs'* by Lori Baker Schena, PHD, a contributing writer for the American Academy of Ophthalmology that had interviewed a number of cataract surgeons to write her article, had this to say; http://.aao.org/publications/eyenet/201103/cataract.cfm

"For cataract surgeons, it's a given that presbyopia-correcting intraocular lenses necessitates more chair time with their patients. Yet instilling realistic patient expectations for the immediate future is only part of the story, according to Deepinder K. Dhaliwal, MD, associate professor of ophthalmology, chief of refractive surgery and director of the cornea service at the University of Pittsburgh. Long-term eye health is of equal importance, especially since Americans are living longer, she said. "When I first started implanting the Crystalens accommodating IOL, I was concerned about the fact that the lens offered minimal if any UV protection. To help protect my Crystalens patients from potentially harmful UV rays, I made it a point to recommend that they wear UV-blocking sunglasses when venturing outside."

But then data from the Beaver Dam and Blue Mountain studies, which implicated blue-light rays as a risk factor for age-related macular degeneration following cataract surgery, caught Dr. Dhaliwal's attention. "I realized that UV light was not necessarily a threat to the patient's eye health once the cataract was removed. Instead, blue light appeared to be more of an issue. And with the exception of one yellow-tinted lens on the market, the other lenses did not block the blue light."

… Dr Dhaliwal's concern about long-term retina health in cataract patients is shared by other ophthalmologists. It also mirrors one side of a larger issue currently being hotly debated in the ophthalmic community: Do the potential benefits of blue-filtering IOLs out-way potential drawbacks?

…Discussions about the potential disadvantages of blue-filtering IOLs do not escape the attention of Bonnie A. Henderson, MD, assistant clinical professor of ophthalmology at Harvard University; The blue-filtering IOL is the primary lens she uses in her cataract practice, and her patients appear extremely satisfied with this choice. "Although I had never come across any clinical problems or complaints about the blue-light filtering IOLs, I had heard the criticisms and wanted to investigate whether there was any validity behind the claims. The last thing I wanted to do was cause harm to my patients so I decided to undertake a comprehensive literature review."

No harm from blue-blocking. Dr. Henderson and her colleague, Kelly Jun Grimes, MS, reviewed 56 reports published between 1962 and 2009 that have relevance to blocking blue light transmission. The studies covered topics ranging from sleep disturbance, visual outcomes and cataract surgery to lens transmittance, sunlight exposure and macular disease. Their findings, which were published in the *Survey of Ophthalmology*, found that 91 percent of peer-reviewed reports concluded that there were no significant detrimental effects of blue-light filtering IOLs on different indicators of visual performance, including visual acuity, contrast, sensitivity, color perception and photopic, mesopic and scotopic

sensitivities. “While some researchers have been vocal in pointing out the potential concerns with these lenses, the vast majority of studies found that any potentially harmful effects on vision were not clinically significant,” Dr. Henderson said. “For example, while the literature shows some decreases in scotopic vision, when accounting for the removal of the aging crystalline lens, the overall effect is a large improvement in scotopic vision regardless of the color of the IOL.”

She added that in clinical studies, the blue-light filtering was well tolerated, and there were no reports of altered night vision or insomnia. “This finding is important given the theoretical detrimental effects of blue-light filtering on night vision, as well as sleep regulation, melatonin and its effect on the circadian cycle.” The finding is particularly relevant, said Dr Henderson, given the potential benefit of lowering the incidence or progression of AMD with blue-blocking IOLs.

… However, a new study by Gray and colleagues, currently in press in *Journal of Cataract and Refractive Surgery,* found that patients with blue-light filtering IOLs performed significantly better under driving conditions with glare compared with similar patients who had clear IOLs. And Dr. Henderson noted the study by Nolan and colleagues showing that blue-filtering IOLs affected macular pigment density. This study demonstrated that patients wearing these lenses had an increase in pigment density, which may have a role in the prevention of AMD,” Dr. Henderson said. “while the observed connection between this increase in pigment density and a reduced risk of AMD development or progression should be further studied, if it turns out there is a beneficial effect from blue-filtering IOLs, I want to give patients that advantage. In the meantime, it is obvious from the published literature that blue-light filtering IOLs are not harmful and may offer real advantages.”

PS. Dr. Dhaliwal consults for Alcon Laboratories Inc. Dr. Henderson consults for Alcon and Ista Pharmaceuticals.

The case against blue-blocking IOLs

In April 2004, *EyeWorld,* the newsmagazine of the American Society of Cataract & Refractive Surgery, published an article by Jack T. Holladay M.D., M.S.E.E., F.A.C.S. entitled, *Perspectives in lens and IOL Surgery Blue-blocking IOL benefits based on fallacies, not fact.* Professor Holladay writes:

“There are many myths about blue-blocking intraocular lenses. These intriguing fairy tales about how blue blockers do not affect color or scotopic vision, but do prevent age-related macular degeneration (ARMD) are unfortunately being told as if they were true, most recently at the Royal Hawaiian Eye Meeting in January. But as I said there, if the right tests were performed and the scientific evidence examined more closely, all would see that blue blockers have no known benefit with known sacrifices.

What’s more, if blue-blocker manufacturers were concerned about light transmission, they should have instead created IOLs with the natural lens characteristics of 20-year-olds when optics are optimized, not the 55-year-old. But current blue-blocking lenses are way off that mark. Detecting colors; Proponents of the AcrySof Natural Lens (Alcon, Fort Worth, Texas), which blocks light’s blue wavelength, often quote the Farnsworth D-15 test as evidence that the lens does not affect color perception. However, that test is designed to examine congenital red/green color-blindness and doesn’t test blue color vision. The test that should have been used to detect blue perception of color is the Farnsworth-Munsell 100-hue test, box 4, which has 21 caps of various shades of blue to arrange during testing. Meanwhile,

The Farnsworth D-15 has only one blue cap that needs to be placed correctly in order for someone to pass the test for blue perception.

Furthermore, patients that believe nothing is wrong with their color vision after they receive a blue blocking IOL are comparing this to the vision with their cataract, not the normal 20-year-old crystalline lens. As the lens ages, it yellows. So when they compare their vision through a yellowed lens before surgery to a yellowed artificial lens after surgery, they see no significant difference. What they don't realize is that their vision would be markedly different through a clear lens, similar to looking through yellow sunglasses that block at 450nm. Although blue-blocking lenses do not affect the perception of other colors besides blue, the blue itself cannot be perceived normally. You cannot tell a navy from a black suit. The light blue sky turns green. And yet blue is the favourite color of 80% of people in their 80s, according to ycolor discrimination, color naming and color preference in 80-year-olds, published in 1999 in Aging: Clinical and Experimental Research.

Scotopic vision decreased. As we age, we lose 30% of our paramacular rods. There are rods in the central macular region and are what allow us to have decent night vision in low light conditions. They are what, after three to five minutes of being in dark conditions, allow us to get around. But blue-blocking IOLs reduce our ability to see in low light conditions even further. Think of it this way: X A 53-year-old person with a crystalline lens experiences a 33% decrease in scotopic vision;

X A 75-year-old person with a crystalline lens experiences a 75% decrease in scotopic vision; and X A person with blue-absorbing IOL experiences a 27% to 35% decrease in scotopic vision.

X A person with UV only has about a 1% to 2% decrease in scotopic vision.

In short, older people already have a decreased ability to see in scotopic conditions, and blue-blocking IOLs further reduce that ability. After all, IOLs that block UV light only decrease scotopic vision by only 1.5% to 1.6%. These results are based on the study How much blue light should an IOL transmit, published in the British Journal of Ophthalmology in 2003, by Martin Mainster, M.D., PhD.

Sunlight not proven to accelerate ARMD. Some believe that the Beaver Dam study shows that people that have been exposed to light for long periods of time have an increased risk of macular degeneration.

In Sunlight and aged-related macular degeneration, The Beaver Dam Eye Study, published in the Archives of Ophthalmology in 1993, researchers divided participants into two groups: One that was exposed to being outside more than five hours per day, and the other was composed of people that recalled they were outside less than two hours per day in the summer. The study found the former group to have a higher prevalence of ARMD.

However, the study didn't investigate whether people spending more time in the sun were more likely to smoke or have unhealthy lifestyles, which is very probable. And these are factors that certainly increase the rate of ARMD. There are more than 10 studies on light and ARMD and none have been able to prove a relationship between blue light and the risk of ARMD…"

PS. Jack T. Holliday is clinical professor of ophthalmology, Baylor College of Medicine, Houston. He has financial interests in Pfizer (New York) and Advanced Medical Optics (Santa Ana, Calif.) both of which make IOLs.

In the American Academy of Ophthalmology article*, Clinical Update: Cataract – Back-and-Forth Controversy on Blue-Filtering IOLs,* Lori Baker Schena, PHD writes;

"Martin A. Mainster, PhD, MD, is a professor of ophthalmology at the University of Kansas in Kansas City, as well as a physicist and author of more than 30 peer-reviewed articles on photoreception and photic retinal hazards.

Dr. Mainster actually introduced the concept of the UV-protective IOL in 1978, but now he notes that "IOLs without UV-absorbing chromophores have been used safely and successfully for more than four decades. That's why colorless UV-transmitting IOLs as well as colorless UV-blocking and yellow-tinted blue-blocking IOLs are used widely today."

No cause to fear blue. He added that, in fact, "10 of the 12 major epidemiological studies show no link between environmental light exposure and AMD. Most AMD occurs in phakic adults over 60 years of age, despite senescent crystalline lens photoprotection far greater than that of blue-blocking IOLs. If light does play some role in AMD, then pseudophakes should wear sunglasses in very bright midday environments. Pseudophakes have the freedom to remove their sunglasses for optimal photoreception but not the yellow filters in their IOLs. Blue-blocking IOLs force cataract surgeons to choose fear of the unproven, largely failed phototoxicity-AMD hypothesis over light that patients need for their best possible circadian and dim light photoreception. Growing evidence shows that cataract surgery does not cause macular degeneration so blue-blocking IOLs won't prevent it."

Some proponents of blue-blocking IOLs point to a study by Nolan and colleagues investigating whether blue filtering IOLs affect the density of macular pigment. (Macular pigment has been proposed as a protectant against AMD because it absorbs blue light at a prereceptoral level.) The study shows that pigment density increased with blue-blocking IOLs but remained stable with colorless IOLs, Dr Mainster said, adding that this was "an odd result because the patients' original crystalline lenses absorbed far more short wavelength light than their implanted blue-blocking IOLs. Also, the relationship between macular pigment and AMD is unproved, and any potential protective value of macular pigment probably lies in its biochemical rather than optical properties."

The benefits of blue light. Dr Mainster regards blue light as possibly vital to a number of physiologic processes, and interfering with it may have adverse effects. "Blue-blocking IOLs eliminate half of a pseudophake's violet and blue light. These wavelengths provide 45 percent of scotopic, 83 percent of circadian and 94 percent of S-cone photoreception. It's no wonder that blue-blocking IOLs have been shown clinically to reduce photopic luminance contrast, photopic S-cone foveal thresholds, mesopic contrast acuity and scotopic short wavelength sensitivity," he said."

PS. Dr Mainster consults for Abbott Medical Optics, that makes IOLs.

http://www.aao.org/publications/eyenet/201103/cataract.cfm

Question: Which side of the IOL debate can we trust? Answer: Neither!

The fundamental reason why you cannot entirely trust any of these arguments, even if there is an element of truth in each, and they are presented by very learned men in their field, is that each of the professors are all professionally linked with large corporations who either make IOLs or manufacture optical or pharmaceutical products that are specifically recommended by them. This professional connection is no different than the sort of incestuous relationship that lighting engineers, doctors and optical scientists have with the

Global Lighting Association mafia cartel's push to convert the world to LEDs, largely by cleverly lying through their teeth.

Regrettably, in the end, the consumer must do his own research and reach his own conclusions, because virtually all these large companies with whom these professors and doctors have regular intercourse with are totally corrupt and can't be trusted.

Here are just two examples that illustrate this profound point. Professor Jack T. Holliday has claimed he has financial interests in Pfizer (New York) and Advanced Medical Optics (Santa Ana, Calif.). Professor Mainster consults for Abbott Medical Optics. So what do we know about these companies, their relationships with their consultants, and their ethical standards?

Advanced Medical Optics (AMO) and Abbott Medical Optics

Advanced Medical Optics, Inc. (AMO) is based in Santa Ana. It was taken over by Abbott Medical Optics Inc. in February 2009. It is a global medical supply company and manufactures IOLs, surgical equipment and ophthalmic pharmaceuticals. It employs about 4000 people worldwide and has a presence in more than 60 countries. In turn, the company is owned by Abbott Laboratories, a giant American multinational pharmaceutical and health care products company, founded in 1888, headquartered in North Chicago, Illinois. The company in 2012 had revenue of US$39.874 billion and 91,000 employees.

- In October 2011, the company agreed to pay at least US$1.3 billion for illegally marketing its Depakote epilepsy drug to the US government and 24 states. To date, it is the third-largest pharmaceutical settlement in US history.
- In 2011, Abbotts Laboratories was reported for using tax avoidance strategies involving two Irish subsidiaries.
- On October 2, 2012, the company was charged with a $500 million fine and $198.5 million forfeiture for illegal marketing. This fine is the second-largest criminal fine for a single drug. For this, Abbott has also been put on a five-year term of probation for these criminal activities which is still in force today.

Pfizer

Pfizer is an American multinational pharmaceutical corporation, founded in 1849, headquartered in New York City. In 2013, the corporation's annual revenue was US$51.584 billion and it had 78,000 employees.

- In 1993, the US FDA approved gabapentin (Neurontin, Pfizer) only for the treatment of seizures. Warner-Lambert, which merged with Pfizer in 2000, sponsored articles about the drug for medical literature and suppressed unfavourable study results to promote it. Later the company paid $430 million to resolve criminal and civil health care liability charges involved with their lies about the drug. Today it is a mainstay drug for migraines.
- In September 2009, Pfizer agreed to pay $2.3 billion to settle civil and criminal allegations that it had illegally marketed four drugs – Bextra, Geodon, Zyvox, and Lyrica – for non-approved uses; it was Pfizer's fourth such settlement in a decade. Pharmacia & Upjohn Company, Inc., a Pfizer subsidiary, agreed to plead guilty to misbranded promotion of Bextra, a felony violation of the Food, Drug and Cosmetic Act. The criminal fine accounted for $1.3 billion of the settlement, and was the largest criminal penalty imposed in American history until the BP plea agreement for the Deepwater Horizon oil spill. The case was also the largest civil settlement against a pharmaceutical company. Six whistle-blowers will receive $102 million for their participation in the civil investigation.

- 1996: David Franklin exposed illegal promotion of the epilepsy drug Neurontin for unapproved uses, while the company withheld evidence that the drug was not effective for these conditions.
- 2000s: Stefan P. Kruszewski highlighted Pfizer's clinical science that was misrepresented by the defendants in their marketing and promotion of certain drugs.
- 2004: Peter Rost, former vice president at Pfizer, reported accounting irregularities to the US authorities. He testified in Congress as a private individual in favour of drug re-importation, a position strongly at odds with the official policy of the pharmaceutical industry.
- 2009: John Kopchinski through a lawsuit launched a massive government investigation into Pfizer's illegal and dangerous marketing of Bextra, a prescription painkiller. Pfizer paid $1.8 billion to the government to settle the case, including a $1.3 billion criminal fine, the largest healthcare fraud settlement in US history.
- In 1968 Pfizer acquired Quigley, and this division sold asbestos-containing insulation products. Asbestos victims and Pfizer have been negotiating a settlement deal which calls for Pfizer to pay $430 million to 80 percent of existing plaintiffs.
- 1979: Bjork-Shiley heart valve – Pfizer purchased Shiley at the onset of its Convexo-Concave valve ordeal. Approximately 500 people died when defective valves failed and in 1994, the United States ruled against Pfizer for $200 million.
- Blue Cross Blue Shield – the health insurance company Blue Cross Blue Shield (BCBS) filed a lawsuit against Pfizer for reportedly illegally marketing their drugs Bextra, Geodon and Lyrica. BCBS reported that Pfizer used kickbacks and wrongly persuaded doctors to prescribe the drugs. FiercePharma reported that "According to the suit, the drug-maker not only handed out those "misleading" materials on off-label uses, but sent doctors on Caribbean junkets and paid them $2000 honoraria (medical language for a bribe) in return for their listening to lectures about Bextra. More than 5,000 healthcare professionals were entertained at meetings in Bahamas, Virgin Islands and across the US, the suit alleges. Pfizer has had similar cases brought against it which it has settled with the US federal government and with more than 40 US states. Pfizer denies the allegations.
- Wyeth's Rapamune: A whistle-blower suit was filed in 2005 against Wyeth, which was acquired by Pfizer, alleging that the company illegally marketed their drug Rapamune. According to whistle-blowers, Wyeth also provided doctors and hospitals with kickbacks to prescribe the drug in the form of grants, donations and other money. A US House of Representatives committee, led by Rep. Edolphus Towns is currently investigating these allegations.
- Political Lobbying: Pfizer is a member of the US Global Leadership Coalition, a Washington D.C.-based coalition of over 400 major companies and NGOs that advocates for a larger international affairs budget. Pfizer is one of the largest lobbying interests in United States politics. For example, in the first 9 months of 2009 Pfizer spent over $16.3 million on lobbying US congressional lawmakers, making them the sixth largest lobbying interest in the US.
- Pfizer continually lobbies the US government to oppose generic drugs entering the US. According to US State Department cables released by the whistle-blowing site WikiLeaks, Pfizer lobbied against New Zealand getting a free trade agreement with the US because the company objected to New Zealand's restrictive drug buying rules and tried to get rid of New Zealand's former health minister, Helen Clark, in 1990.

http://en.wikipedia.org/wiki/Pfizer

So the question remains. Would you trust any of the ethical standards of these companies or their consultants?

In acknowledgment of "honest" ophthalmologists and doctors

In this chapter the author here has tried to be as impartial and balanced as possible presenting both sides of this important controversy over IOLs, particularly relating to the increased blue-light hazard that is only going to rapidly increase with LEDs. It is a complex subject and very difficult to get unanimous agreement on it.

What comes out time and time again, is the fact that even sincere men and women, specialists in a particular field, can still have honest differences of opinion, or have their views at least partly "coloured" by self-interest or prejudice. Obviously there are still, good, honest, businessmen, professors, ophthalmologists, doctors and scientists in the world whose opinions and actions are not totally motivated by monetary greed, self-interest, peer pressure, corporate interest or government policy. But sadly, it seems, such individuals are becoming a distinct minority at the present time.

The Fred Hollows Foundation

See: http://www.hollows.org.au/ (Australian charity) http://www.hollows.org.nz/ (New Zealand charity).

Today a big gripe among many poorer, private patients, even now in the western world, is the extremely high cost of cataract operations. In the US now ranging between $3000 - S5000 per eye, and in the UK at about £1500 – £3000 per eye, depending on the type of operation and IOL.

In the US in 2012, the average cost per eye was $3429 – when at the same time, the Australian and New Zealand charity, *The Fred Hollows Foundation*, founded by the New Zealand born/Australian Ophthalmologist, Fred Hollows (1929-1993), does similar basic cataract operations for the underprivileged in developing countries for just $A25.00 per eye.

At least on the outset, it certainly does seem that something is seriously wrong with the inflated pricing structure in the West that badly needs addressing.

Fred Hollows tirelessly devoted his life to improve the health and wellbeing of indigenous Australians and to address the need for reducing the cost of eye care in poorer developing countries. He would often say*, "I studied medicine so I could help others – set a leg or whatever – and it's given me a great deal of satisfaction."*

Perhaps that is what we should all aspire to, irrespective of our occupations, not just physicians, to emulate his admirable, charitable work? IOLs in the West are often ridiculously expensive costing hundreds of dollars each, even before they reach the surgeon. Fred Hollows Foundation manufactures its own in poor countries at about $5 each.

His main aim was to "end avoidable blindness," train eye health workers and provide eye health services at an "affordable price" in developing countries. In the Pacific alone, four out of five people who are blind don't need to be.

Today, to their credit, a number of dedicated ophthalmologists, doctors, nurses and others often sacrifice huge incomes and comfortable lifestyles in the West to give of their time and skills to work for the Fred Hollows Foundation (often voluntarily) to restore sight to the blind in third world countries – to help Fred's marvellous dream live on.

Currently, Dr Neil Murray, an ophthalmologist, is the Medical Director of The Fred Hollows Foundation NZ. He has trained dozens of local doctors in their respective developing

countries to carry on in the footsteps of Fred Hollows to eliminate blindness. The aim is to train up capable doctors resident in their own countries to *"help the local people help themselves."* This is what largely sets The Fred Hollows Foundation apart from most other similar organisations around the world dedicated to curing blindness.

Two great videos about the Foundation's wonderful work are;

1. ***One Man's Vision – Sir Paul Holmes story on Fred Hollows.*** This is a documentary and interview with Fred Hollows about his colourful life and wonderful charitable work. http://www.youtube.com/watch?v=aWq5Jjw57bg

2. ***Fred Talks: Dr Neil Murray.*** This is a particularly moving talk and presentation by the current Medical Director of The Fred Hollows Foundation NZ about their marvellous work. As Dr Murray perceptively explains, "blindness is a death sentence." "If you're blind your life expectancy is reduced to only a third of a person who can see." In this inspiring presentation, Dr Murray relates of incredibly "humbling" cases in which very poor patients have shown their amazing gratitude after being cured of blindness following cataract operations, which very few people in the "rich" West could ever fully appreciate or ever comprehend. One of the things he emphasises most is, irrespective of the culture or often extreme poverty of the patient, even though the costs of the operations are relatively cheap the surgeon's chief aim is still to provide the very best of care for the patient. Dr Murray's short YouTube presentation is well worth viewing and vividly epitomizes what in fact true healthcare, science, medicine and charity is all about.

http://www.youtube.com/watch?v=JQ1TjSD9ZxY

Of special note, the English word ***charity*** popularized in the 1600s by the King James Bible (KJV) translators, in I Corinthians 13 does not mean what most people today imagine it to mean.

The English word comes from Old French *charite,* from Latin *caritas* from *carus* 'dear.' In the New Testament the Greek word *agape* is sometimes translated in the KJV 'love' and sometimes 'charity.' In the apostle Paul's epistle to the Corinthians, in Corinthians 13, *agape* is translated 'charity' in the sense of "Christian love for one's fellows." It does NOT mean exclusively *'love'* or indeed "giving money or goods to help the poor." It is a combination of all these things in a genuine desire to help our fellow man, not to give to others simply to improve our own self esteem (I Corinthians 13:4-5) or become "man of the year."

- *"Though I speak with the tongues of men and angels, and have not **charity**, I am become as sounding brass, or a tinkling cymbal. And though I have the gift of prophecy, and understand all mysteries, and all knowledge; and though I have all faith, so that I could remove mountains, and have not **charity**, it profiteth nothing. And though I bestow all my goods to feed the poor, and though I give my body to be burned, and have not **charity**, it profiteth me nothing… And now abideth faith, hope, **charity**, these three; but the greatest of these is **charity**."* (I Corinthians 13:1-3, 13).

We all need to work or run businesses to generate money to support ourselves and our families and there is absolutely nothing wrong with that at all.

But the fact is, at least from a Biblical perspective and standpoint, according to Paul, money should not take pre-eminence, especially if we are highly educated as Paul was spectacularly so, having been brought up at the feet of Gamaliel, the leading, highly respected, Pharisee doctor of the law in his day. If we are financially better off than most, at least from a

Christian perspective, we all have a "higher voluntary duty" to share our special talents and accomplishments in "charity' for our fellow man.

Perhaps, one of the reasons why so many dedicated ophthalmologists and eye surgeons, more than most physicians and most other professions, so often elect to "voluntarily" give of their skills and time working through organizations like The Fred Hollows Foundation – is that one of the most gratifying rewards and honours in life [that most other people will never experience] must surely be the huge opportunity and privilege to restore a poor person's precious eyesight who would otherwise remain blind – and then be rewarded with a gift, not of money – but of sincere, heartfelt gratitude which all the money in the world can never buy.

SEE International

A similar organization was founded in the US in 1974 called SEE International, headquartered in Santa Barbara, California, that does much the same thing. Dedicated medical, surgical and volunteer ophthalmic surgeons devote their time with the objective of restoring sight and preventing blindness to disadvantaged individuals in developing countries.

Nearly 90% of blind people live in developing countries, where SEE International focuses the majority of its work. Over the last four decades, SEE International has screened approximately 3.2 million individuals and completed more than 400,000 surgeries worldwide through a generous global volunteer network of more than 600 ophthalmic surgeons, registered nurses and technicians. http://www.seeintl.org/history/

In addition to its International work, SEE serves its local community as well through the Santa Barbara Vision Care Program. It was created to address the need for free comprehensive eye care with the goal of saving eyesight through early detection among underserved, poor populations. More than 52,000 low-income, uninsured individuals living in Santa Barbara County have been served since the inception of the program.

So all is not totally lost, there is no doubt. Thankfully, there are still some wonderful, dedicated, impartial, professional medical people out there and around the world whose heart is in the right place.

But let's not naively deceive ourselves – that stunningly beautiful, seductive goddess from ancient Rome, Juno Moneta, (now known by her nick-name 'money'), even after 2000 years of prostituting herself and jingling her golden wares in the mint at her palatial temple on Capitoline Hill – still has an extremely, dedicated, large, modern-day following!

The aim of this book is to put forward honest, UNBIASED evidence from both sides to help the reader reach a personal, informed decision.

Of even greater concern is this: Today there are a *handful* of eye specialists who actually claim that most cataract operations are completely unnecessary, as they say they can eliminate cataracts "*without surgery*."

This issue is very controversial indeed, but it must be mentioned.

Eliminate cataracts without surgery

http://www.preventcataract.org/

This is what these authors radically claim:

"Eye drops can now dissolve cataracts. What your eye doctor doesn't want you to know – The story of a crime."

"The information available here will not be provided by an eye doctor. They are more interested in your money than saving your vision.

The problem. As we age, we are more likely to develop senile cataracts, and the number of persons in the United States affected by cataracts is estimated to rise to 30.1 million people in the next 20 years, an increase of 50 percent.

Cataract is the leading cause of blindness in the world today and is also the leading cause of vision loss in the United States, responsible for about 60 percent of all Medicare costs relating to vision. Senile cataract is caused by nuclear matter of the elderly human lens hardening and taking on a yellowish/brown color. The lens of the eye, which is mostly water and protein, becomes clouded or opaque, resulting in poor vision or vision loss. The light passing through the lens is scattered, making it impossible to attain normal vision even with corrective lenses. Cataract is more common in older people. The prevalence of age-related cataract is expected to increase as the U.S. population continues to age. This is a tremendous financial burden on society. In the U.S. alone, $3.5 billion is spent every year on cataract operations.

This hardening and discoloration of the lens is the result of lifelong cross-linking (or glycosylation) of the lens proteins with ascorbate. This persists in the aqueous humor at high concentrations, due to the kynurenine derivatives, and takes place due to the low availability of natural defences in the form of anti-oxidants, (which decline with advancing age).

Also, populations that consume large amounts of milk and dairy products have a much higher incidence of cataracts. The problem appears to be the milk sugar, lactose. In the digestive tract, lactose breaks apart, yielding two simple sugar molecules, glucose and galactose. When blood concentration of galactose increase it can pass into the lens of the eye. There, galactose degrades into various molecular waste products that can lead to opacities of the lens. Nursing children can generally handle galactose. But as we age, many of us lose much of the capacity to break down galactose. There are even some rare cases of genetic defects in which children cannot break down galactose. These children can form cataracts within the first year of life (Lactose and Cataract in Humans, Journal of the American College of nutrients, 10(1):79-86, 1991)

The usual treatment. Surgery is the only treatment offered by eye doctors. It involves making an incision into the cornea and removing the contents of the lens capsule. An artificial lens is then inserted. While most of these operations are successful, complications do occur, ranging from minor eye inflammation to devastating vision loss. Some common complications are infection, a dislocated intraocular lens, retinal detachment, or a posterior capsule apocity. A PCO is a hazy membrane (capsule) just behind the artificial intraocular lens (IOL) that was implanted during the surgery to replace the eye's natural lens. Severe vision loss may occur as the result of infection or bleeding inside the eye.

Eliminating cataracts without surgery. Ordering information. Mark A. Babizhayev, Ph.D., a scientist based at the Moscow Helmholtz Research Institute for Eye Diseases in Russia, developed and patented eye drops in 1998 which contain the natural di-peptide N-acetylcarnosine (NAC) as its active ingredient. The patents are held by his research group

Innovative Vision Products which markets the eye drops under the trade name Can-C at www.can-c.net …

One drop is put into the eye twice daily. Within 15 to 30 minutes, the NAC passes through the cornea and the cataract begins to dissolve from the outside of the lens towards the center. There is some evidence that NAC is also beneficial in cases of glaucoma, presbyopia and other disorders. An excellent book on this subject, *The Cataract Cure,* can be purchased from www.iuniverse.com

The following is taken from the *Expert Opinion* link on www.can-c.net .

Essentially, N-acetylcarnosine is a "carrier" for the di-peptide L-carnosine into the aqueous humor of the eye (this is the fluid area surrounding the lens).

It is here that the substance becomes most active in its ability to basically act as a natural and comprehensive anti-oxidant. Once N-acetylcarnosine has delivered L-carnosine safely through the aqueous humor into the lens, the L-carnosine itself is flushed out of the eye via the canal of schlemm and once into the bloodstream it is broken down by carnosinase and excreted. N-acetylcarnosine is acting as a time release version of carnosine resistant to hydrolysis with carnosinases.

The major role of N-acetylcarnosine and L-carnosine is their facility to act in the biological system as universal antioxidants. They possess the ability to protect cells from oxidative stress, both in the lipid phase of cellular membranes and in the aqueous environment. L-carnosine is able to reduce the content of lipid peroxidation products in the peroxidized lens fiber cells plasma membranes, and to repair their structure accordingly. It is the only known anti-oxidant able to protect structural proteins of the lens/alpha-crystalline, from the free-radical induced oxidation process.

The statistics in the human trials in Russia show that Can-C eye-drops, applied for 6-months (twice daily to the eye) in patients all suffering from senile cataract, had the following results:

- 88.9% had an improvement of glare sensitivity.
- 41.5% had an improvement of the transmissivity of the lens.
- 90% had an improvement in visual acuity.

…Clinical trials carried out in China on 96 patients with cataracts of varying degrees of severity showed a profound effect; with positive effects being 100% on primary senile cataract and 80% on mature senile cataract over the 6 month trial period. Positive effects were also observed with other types of cataract. Another trial indicated an eye condition improvement of 41.5% to 100% for patients within a 6-month period, with sustainable results 24-months later. Why go all the way to China to do a study? Why not do one in the US or other countries? Could it be that the government of China is less dominated by commercial interests than elsewhere?

Why is the public not told about this marvellous development? Some ophthalmologists do as many as 30 cataract operations per day. The average cost is over $3000 per eye. Do the arithmetic and you will see why they will never have any interest in eye drops. If NAC becomes widely used, they will lose this income. Also, optometrists would lose any kickback fees they may be getting for referring patients to the surgeons.

There is a tendency on the part of both ophthalmologists and optometrists to recommend surgery before it is actually needed. The sooner surgery is performed, the sooner they get

their money. But, sadly, the roughly 2% of cataract operations that develop serious complications will occur that much sooner in the patient's life. That is what is so disgusting about the profit-making side of this business. To learn just how widespread this practice is, you only need to do an Internet search for "cataract surgery kickbacks".

This situation is similar to the referral of customers who have been talked into Lasik surgery, usually to correct myopia which could have been prevented. A kickback from the surgeon to the optometrist of $1000 is not uncommon. Kickbacks are actually illegal, but by calling them "co-management fees" or something else, they can get away with it. But the customer isn't informed that this is the real reason that surgery is being encouraged…

Because N-Acetyl Carnosine lacks FDA approval as a cataract cure, the companies selling it are wary of making claims for it. The boxes containing the eye drops only claim that the drops help "soothe tired eyes" – and they list NAC as an "inactive ingredient." Of course, the FDA has been totally corrupted by big business for a long time and is against anything that would reduce the profits of the eye care business…"

Clearly, diet, exercise, age, occupation or exposure to excessive amounts of UV and blue light, all do have an integral part in the development of cataracts.

Whether the best method to cure cataract blindness is surgery or natural remedies must ultimately be up to the patient – and either way, the outcome is usually successful – but this most definitely is <u>not</u> the case at all with LED blue-light damage to the retina which is usually permanent.

Needless to say, cataract surgery (whether rightly or wrongly) using IOLs is still by far the predominant method being used to cure blindness today.

Therefore, the type of IOLs chosen by ophthalmologists or patients, without appropriate additional filtering spectacles for UV or blue light, are deeply related to how much blue-light hazard from LEDs will eventually damage the retina.

Above all, medical science needs to break away from the deadly grip of its deeply vested financial interests and orthodoxy to be able to properly treat the patient's interests as a first priority – and to do that, it first needs to develop an open mind, which seems a horribly long time in coming.

CHAPTER NINETEEN

LEDS AND THE GLOBAL EPIDEMIC OF MYOPIA

Myopia: (or more commonly known as 'near-sightedness' or 'short-sightedness') is a condition of the eye where the light that enters it does not directly focus on the retina but in front of it, causing the image that is seen when looking at a distant object to be out of focus, but in focus when looking at a close object. There are many different specific types of myopia.

Cause: There are many fanciful claims by the medical profession for the causes of myopia ranging from hereditary factors, higher intelligence quotient (IQ), general nutrition, high consumption of whole grains, dietary carbohydrate intake, hyperinsulinemia and insulin resistance. Of course, proper nutrition with a strengthened immune system does help.

However, there is only one primary true cause of most myopia in the majority of cases and that is excessive reading, study and other close work under artificial light.

The reason for this is that after doing prolonged close work, the focusing muscle inside the eye locks up into a state of near focus. Over time this leads to permanent near-sightedness, an abnormal lengthening of the eye. The "distance" or "minus" glasses routinely prescribed accelerate this process by causing the world to appear closer. This causes the eyes to exert more focusing effort, resulting in even more myopia. Stronger glasses are prescribed again and again, creating a vicious cycle of increasing myopia.

As the myopia worsens, this often leads to detached retina, glaucoma, early-onset cataracts, macular degeneration and blindness. The more myopia you have, the greater the risk for contracting much more serious eye diseases. So it is important to try and avoid the condition wherever possible, especially in young children and school children.

International Myopia Prevention Association

http://www.myopia.org/

There are two primary schools of thought in dealing with myopia. The most common remedy supported by the mainstream medical establishment, opticians and ophthalmologists, is simply to treat the *effect* rather than the *cause* by continuously prescribing yet more and more spectacles, which sadly accelerates the process. Only a very small minority of specialists concentrate on prevention.

Donald S. Rehm, author of *The Myopia Myth,* an electrical engineer, founded the International Myopia Prevention Association based in Ligonier, Pennsylvania, USA. His website is dedicated to preventing myopia using natural methods.

He claims most of the world's vision specialists are taking their customers' money and, in return, blinding many of them in several ways. Rehm claims most eye specialists ignore prevention because there is more money to be made in 'treating' or 'managing' the problems. His website is very informative and provides a valid alternative view opposing conventional medicine.

Wikipedia listing: Myopia

The current *Wikipedia* listing for *Myopia* under sub-heading, "Prevention" states; "The National Institutes of Health says there is no known way of preventing myopia, and the use of glasses or contact lenses does not affect its progression. There is no universally accepted method of preventing myopia;" etc. These statements typify the widespread erroneous views of the medical establishment.

Jewish Biblical Hebrew Scholars and myopia

There are some who say a poor "diet" or nutritional deficiencies primarily cause myopia, however this is a complete fallacy. For hundreds of years many Jewish scholars reading and writing Hebrew in the Torah and Talmud have consistently developed myopia and short-sightedness. David Landau in his book, *Piety and Power – The World of Jewish Fundamentalism* published in 1993, p.205, writes; "Lay observers have long noticed a high preponderance of eyeglasses among yeshiva students and alumni, and they naturally tended to assume that this was caused by long hours of reading small and/or poor print, often under indifferent lighting. But a medical study recently published in Israel lays much of the blame on shockelling. It maintains that the incessant change of focus, as the eye approaches and recedes from the text, eventually causes myopia. The study was based on a Jerusalem yeshiva, where 90 percent of the students were found to wear glasses – compared to 15 percent at a nearby non-Orthodox high school."

It particularly strikes students of Masoretic Biblical Hebrew because the vowel marks called *neqqudot* or more commonly "cantillation marks" or "pointing" in the text are very small to see and write. When a student takes notes or transcribes text, the eye is continually changing focus from the scroll or book to what is being written down on the writing pad.

More recently in Israel, boys studying in yeshivas with myopia were compared with their sisters, who live in exactly the same environment, have the same diet and same genetic background, but do not study intensely. There was a *huge* difference in the amount of myopia – the boys had on average 4 - 5D more myopia than their sisters.

Eskimos living in the arctic

Eskimos living in the arctic in rural areas without electric lighting were found to have a prevalence of myopia of 1% when first studied in 1950 (Bind). In the succeeding decades, when electric lighting became common, school became mandatory, and diet changed, myopia prevalence rose to 30-36%. But adult Eskimos did not develop myopia at all, only the younger people who had been studying at school.

The 1960s – 1980s:

Up to about the mid-1960s scientists and doctors consistently concluded that myopia was simply a biological trait and that heredity was the most important factor in the patient becoming myopic. However, by the mid-1980s, after analysing animal experimental models (macaque monkeys and chickens) it was discovered that refractive error is not an immutable trait at all, but more a condition created from changes in the individual's visual environment.

The 1980s to 2014 – Myopia statistics in children

In spite of a huge amount of research having been done on myopia by the scientific and medical fraternity during the last 30 plus years, myopia is still exploding, and dramatically so in children.

In the United States, myopia affected about 25% of the population in the 1970s. Today, more than 40% of Americans are near-sighted. In other parts of the world, the situation is even worse. In Asia, for example, a recent study found the prevalence of near-sightedness among Taiwanese children ages 16 to 18 was 84%. Other studies have found that up to 90% of teenagers graduating from secondary school in East Asian cities are near-sighted.

Because conventional medicine and eye specialists do not concentrate on prevention, but keep on prescribing new eyeglasses for children each year, many children who get more near-sighted year after year end up with high myopia as an adult.

High Myopia generally is used to describe myopia greater than -6.00 diopters. A person with high myopia cannot even see the big "E" on an eye chart without corrective lenses.

The explosion of myopia in children is a serious public health concern and it is getting worse and worse now by the day.

Myopia risk lowered when children play outdoors

On May 7, 2013, *Metscape Medical News* published an excellent article by Linda Roach titled *Myopia risk lowered when children play outdoors.*

http://www.medscape.com/viewarticle/803783_print

Linda writes;

"Elementary-school-aged children who spend more time playing outdoors are less likely to develop myopia than their peers who sometimes prefer to stay indoors during school recesses, according to a report by Taiwanese researchers published in the May issue of the journal *Ophthalmology*.

In a separate article published in the same issue, researchers who studied myopic children in Denmark found that seasonal changes in the mean number of daylight hours correlated significantly with 3 indicators of myopia progression: eye elongation (*P=.00*), myopia progression (*P=.01*), and corneal power change (*P=.00*). The figures increased in winter, when daylight is present for about 7 hours in Denmark, the study reports. During the 17.5-hour days of summer, myopic progression still occurred, but the increases were not as large, the report said…

"Myopia has become very high in the past 30 years in Taiwan. It is a very severe public health problem," explained lead author Pei-Chang Wu, MD, PhD, in an interview with *Medscape Medical News.* "Ninety percent of college students in Taiwan have myopia. But in previous generations, the prevalence was about 10%."

Dr Wu is director of ophthalmology at the Department of Ophthalmology, Kaohsiung Chang Gung memorial Hospital, and Chang Gung University College of Medicine, Kaohsiung, Taiwan.

In the comparative, 1-year study Dr Wu and colleagues performed auto-refractions and measured axial length in 571 students at 2 elementary schools in a suburban area and collected other data on the children and their families via a parent questionnaire. The myopia prevalence in the 7 to 11-year-old children was nearly 50% at both schools.

After baseline measurements, one school began a simple intervention with its students (n=333): They turned off classroom lights and encouraged children to go outdoors during their 80 minutes of recess from class each day (6.7 hours per week). In the control school, there were no special recess programs, and children were allowed to stay indoors during recess periods. Both groups had 2 hours of outdoor physical education each week.

At the end of the year, the researchers retested the children's eyes. The measurements showed significantly fewer new cases of myopia in the test group (8.41% vs 17.65%; *P<.001*). There also was less myopic shift in the intervention group (-0.25 D/year vs -0.38 D/year; *P=.029*).

These outcomes demonstrate how small changes might be able to expose children to the bright, natural light that their eyes apparently need to grow normally, Dr Wu told *Medscape Medical news. "*Kids spend a lot of time in school. Therefore, if the educational design could change a little bit, we might get a change in myopia prevalence," he concluded.

In a Danish study, investigators looked for correlations between a surrogate measure of daylight exposure (the total number of daylight hours during winter and summer periods of 6 months each) and myopic progression in 235 myopic children between 8 and 14 years of age.

The scientists confirmed that lower total hours of daylight correlated with higher numbers in the 3 parameters they tested, and vice versa. With an average of 1681 hours of daylight over the course of 6 months, axial eye growth was a mean 0.19±0.10 mm, myopia progression was 0.32±0.27 D, and the corneal power change was -0.04±0.08 D. This compared with axial eye growth of 0.12±0.09 mm, myopia progression of 0.26±0.27 D, and corneal power change of 0.05±0.10 D during summer with 2782 hours of daylight.

Dongmei Cui, MD, PhD, the study's first author and an associate professor of ophthalmology at State Key Laboratory of Ophthalmology, Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, People's Republic of China, says it still is not clear what the light is triggering in the eye to arrest growth.

However, it is not too early for parents of children with myopia to heed the common underlying message of the 2 studies. "I suggest the parents make sure their children spend an adequate amount of time in outdoor activities," she said…"

iPads and tablets may cause eye problems or 'computer vision syndrome'

On March 14, 2012, *New York Daily News* published an article titled, *iPads and tablets may cause eye problems or 'computer vision syndrome,'* and said;

"Ever since Apple announced the third generation model for its popular tablet, all eyes have been on the iPad – but health experts are warning that tablets, much like computers and smartphone screens, are contributing to a host of problems known as "computer vision syndrome."

According to the American Optometric Association, symptoms of computer vision syndrome, or CVS, include eyestrain, headaches, blurred vision and dry eyes…

If you spend two or more continuous hours in front of a digital media screen each day, you are most at risk for CVS.

Why? Because digital media screens are often held close to the eyes, causing eye strain as your eyes shift in and out of focus to view pixilated images on the screens. Plus, some people don't blink their eyes enough when using iPads or other tablets, which can make eyes dry and irritated.

To reduce the risk, users should take a short break every 20 or 30 minutes and try to look away at a distant object for a few seconds.

Also, avoid prolonged work on a tablet. Instead switch to a computer screen that is about 20-28 inches/50-71 cm away from your eyes, according to the American Optometric Association…"

Smartphones are causing sight problems to soar

On August 16 2013, *USA Prepares* published an article quoting from David Allamby, an eye surgeon and the founder of Focus Clinics in London, titled, *Smartphones are causing sight problems to soar,* and said;

"Have you got 'screen sightedness'? Smartphones are causing sight problems to soar, warns eye surgeon:

- David Allamby says there has been a 35% increase in the number of people with advancing myopia since the launch of smartphones in 1997.
- He believes the problem could increase by 50% in the next ten years.
- The problem is so common he has given it a name – 'screen sightedness.'
- 50% of 30-year-olds could have the problem by 2033 due to smartphones

… He says that half of all Britons own smartphones and that they spend an average of two hours a day using them. This, along with time spent using computers and watching television, is putting children and young people at risk of permanently damaging their sight.

New research found that the average smartphone user holds the handset 30 cm from their face – with some people holding it just 18 cm away – compared to newspapers and books, which are held 40 cm away from the eyes.

According to Mr Allamby, excessive screen watching at close proximity keeps the genes that control myopia activated well beyond the age that short-sightedness would have historically stabilized – about 21. Myopia used to stop developing in people's early 20s but now it is seen progressing throughout the 20s, 30s, and even 40s…"

Could using your phone at night cause blindness? Chinese man needed emergency op after spending hours texting his girlfriend in the dark

http://www.dailymail.co.uk/health/article-2646136/Could-using-phone-night-cause-blindness.html

Much more recently, the *Mail Online* 2 June 2014, published an article titled, *Could using your phone at night cause blindness? Chinese man needed emergency op after spending hours texting his girlfriend in the dark,* and said;

"A Chinese man who texted his girlfriend for hours in the dark risked going blind after his retina detached from the back of his eye… Without proper treatment, the condition can lead to blindness in the affected eye… The condition usually strikes between the ages of 50 and 70 – but scientists say an increasing number of young people are suffering from it – and smartphones could be to blame…"

Blue-light toxicity from new back-lit LED screens and indoor lighting

According to these reports just quoted, for example, there has been a phenomenal 35% increase in myopia since the launch of smartphones in 1997 – meaning that 40% of Americans, 84% of Taiwanese children ages 16 to 18 and up to 90% of all teenagers graduating from secondary school in East Asian cities – all have myopia.

In all publications and studies so far to date about myopia, the author is yet to see even a remote connection being made with UV or blue-light toxicity generated from artificial

lighting, smartphones, iPhones, tablets, computers and TV screens. The widespread introduction of back-lit LED screens and LED ambient indoor lighting has occurred only within the last 2 or 3 years or so, and is catching everyone in the medical and scientific community almost totally off guard.

Can you imagine how the incredibly damaging blue-light emissions from these LEDs on the retina are now beginning to further exacerbate this myopia epidemic? – by seriously affecting the eyes still further in the millions of school children who already have advanced myopia – who are so wedded to their smartphones and iPads they even take them to the bathroom to clean their teeth – then take them to bed?

Can you imagine how long it is going to take before they all develop much more serious, premature eye problems or go blind? Not such a long time at all one would suggest.

CHAPTER TWENTY

LED, XENON, HID & LASER HEADLIGHT DANGERS

All around the world, gradually more and more drivers are increasingly complaining about the rising number of conspicuous "super-bright, bluish white" glaring headlights that they find are very dazzling. Almost always these headlights will be either LED, Xenon, HID or Laser types – which are all extremely dangerous for a number of reasons.

Yet global car manufacturers, government agencies and the police still persist in blaming most serious motor vehicle accidents on our roads on "drunk drivers, speed, age, sex, distraction, cell-phone texting, dangerous roadways or fatigue" – when really these reasons given are often far from the truth and are an enormous *over-simplification* of the real cause – which at night is more often than not, inappropriate, dazzling headlights.

According to the US NHTSA's 2005 statistics, head-on crashes were only 2% of all traffic accidents. Yet, they accounted for 10% of all fatal traffic accidents in the United States. These sorts of figures are mirrored all around the world. Even with the advent of airbags and other increased safety measures, any person who doesn't die in a head-on crash, and continues on to survive a collision will likely suffer life-changing injuries.

Hannah Elliot, in *Forbes,* on 21 January 2009, wrote an excellent article titled, *Most Dangerous times To Drive,* highlighting the dangers of night driving in crash statistics, and writes:

"To compile our list of the most dangerous times to drive, we consulted the latest crash reports from the National Highway Traffic Safety Administration, the Insurance Institute for Highway Safety and AAA's Foundation for Traffic Safety. We also sourced studies from University of California at Berkeley's Traffic Safety Center, which researches motor vehicle collisions and how to avoid them.

Time of the day plays an important role in evaluating fatal crashes, in no small part because other dangerous factors are compounded at night… Nationwide, 40% of fatal crashes happen at night, with a fatality rate per mile of travel about three times as high as daytime hours…

The fewest deaths by crash in 2007, the latest year with complete data, happened early in the morning, between 4 a.m. and 5 a.m. those hours see significantly less traffic – only 9% of the average amount during peak hours… Weekends – when the greatest number of people are on the road – predictably see the highest numbers of crash victims, with a combined average of 143 deaths for Saturday and Sunday, according to the IIHS…" http://www.forbes.com/2009/01/21/car-accident-times-forbeslife-cx_he_0121driving.html

Head-on Collisions statistics

A head-on crash typically occurs when a vehicle crosses a centreline or a median and crashes into an approaching vehicle. The 1999 statistics from the Fatal Analysis Reporting System (FARS) indicate that 18 percent of non-interchange, non-junction fatal crashes, were

two vehicles colliding head-on. The percentage was the same for 1997 and 1998 data. Some of the complete statistics revealed were expected, while others shocked many researchers:

1. 75 percent of head-on crashes occur on rural roads.
2. 75 percent of head-on crashes occur on undivided two-lane roads.
3. 83 percent of two-lane undivided road crashes occur on rural roads.
4. The high percentage of head-on crashes on rural, undivided, two-lane roads might suggest that many head-on crashes relate to failed passing maneuvers. However, in nearly all cases, fatal head-on crashes occur in non-passing situations.
5. Of the total 7,430 vehicles involved in head-on crashes on two-lane, undivided roadway segments, only 4.2 percent involved a vehicle "passing or overtaking another vehicle" (1999 data). The corresponding percentage for rural roads was 4.3 percent… **Roughly 91 percent of the vehicles involved in fatal head-on crashes on two-lane, divided roadways are related to vehicles either "going straight"** (68 percent of the total head-on fatalities) or "**negotiating a curve"** (23 percent of the total). Combined, that's 91 percent of the total!
6. In 2005, (according to the NHTSA's statistics), in the US there were 21,924 fatal crashes (56%) in rural areas and 17,265 fatal crashes (44%) in urban areas.
7. In rural areas, 53% of the crashes occur during the day while 46% occur at night. In urban areas the situation is reversed with 45% of the crashes occurring during the day and 55% of the crashes occurring at night.
8. Approximately 91% of night-time rural fatal crashes occur on dark road-ways and only 9% occur on roads lighted by street lights.

From these baffling statistics, especially head-on collisions at night, researchers erroneously claimed (and still do, by the way) that the reasons for all these head-on crashes were: "driver falls asleep, speed, is drunk, is distracted or travels too fast on a curve" – when the real reason is that the driver who has driven his car across the median strip into the opposing vehicle has been *blinded* by the lights of the opposing vehicle.

These statistics way back in 1999, largely were related to yellowish-white halogen headlights (that are much less bright and their natural, yellowish color and spectral emissions are softer on the eyes) that were standard at the time – but now the situation is becoming very much worse being exacerbated by the increasing numbers of vehicles with "bluish-white hue" LED, Xenon, HID or Laser headlights – that are often up to four times more powerful.

Nearly 90% of a driver's reaction ability while driving relies on sight, yet the ability to see goes down dramatically at night. Your depth perception, color recognition and peripheral vision all take a nosedive when the sun goes down. Clearly, given these factors affecting head-on fatalities, the causes are much more complex than we are led to believe.

International headlight regulations and specifications

There are no standard international headlight regulations and requirements. Often regulations differ between countries. In the US, even individual states have their own regulations. While in the EU, the ECE regulations for filament headlamps and for high-intensity discharge headlamps specify a beam with a sharp, asymmetric cut-off preventing significant amounts of light from being cast into the eyes of drivers of preceding or oncoming cars, the control of glare is less strict in the North American SAE beam standard contained in FMVSS / CMVSS 108.

Currently ECE Regulation 48 only requires all new vehicles to be equipped with headlamps emitting white light, although previous ECE regulations also permitted selective yellow light, which from 1936 until 1993 was required on all vehicles in France.

Yet these regulations entirely neglect to address even the most basic safety requirements being both the spectral colour of the light and optimum intensity that most suits the capabilities of the human eye. Hence, all in all, the current regulations and specifications for motor vehicle headlights around the world are simply a huge mishmash of inconsistent, inappropriate standards that more often than not – actually *contribute* to motor vehicle accidents.

What are needed, (because most makes of cars are now exported to multiple countries all around the world) are consistent, international regulations and specifications, that are common to everyone. These regulations should be much more carefully formulated not only by headlight manufacturers, car companies and government officials, but should be overseen in the future by a eminent, INDEPENDENT, panel of ophthalmologists and optical scientists who better understand the biological reasons why many accidents occur through the severely compromised night vision of drivers.

Indeed, (although this chapter is largely confined to LEDs, night-driving and headlights), a much stronger argument for eminent ophthalmologists to lead or be involved with the formulation of daylight traffic motor vehicle regulations exists as well. This is because, in the UK's Daily Telegraph 29 October, 2010, the Institute of Advanced Motorists (IAM) claimed that low sun in the morning and evening (supported by valid statistics) creates even more dangers for drivers than travelling at night or in bad weather combined.

Biological reasons why LED, Xenon, high intensity discharge (HID) & Laser bluish-white headlights are dangerous

Manufacturers often claim that while these bluish-white headlights are brighter than standard halogen headlights, the reason that they appear an irritation to opposing drivers is that people tend to stare into them due to their novel bluish hue. The truth, however, is far from that. Not only are LED, Xenon, HIDs and Xenon-Laser headlights up to three or four times brighter, more importantly, the dangerous "blue" part of the visible light spectrum which they all emit scatters in the eye, which then leads to retinal image contrast and therefore greater disability glare from optical dazzle and veiling.

If you look at an LED with its sharp blue spectral spike, and compare it to a yellowish halogen of the same lumens, the LED will always appear much brighter, when in reality it is not. It is an optical illusion, caused by the blue light emitted by the LED which places the eye under greater stress. Blue hue headlights are unsuitable for car headlights because they place excessive stress on opposing driver's eyes.

Vehicles equipped with HID headlights in the EU (except motorcycles) with a luminous flux of 2000 lumens or more are required by ECE regulation 48 also to be equipped with headlamp cleaning systems and automatic beam levelling control. The reason for this is that all dirty headlight lenses scatter light emissions and create greater glare. This is much more pronounced with bluish colors and higher intensities.

The brighter the light, the greater the scotomatic glare, known more commonly as photostress. Photostress occurs because it takes time for visual sensitivity to recover after eyes are exposed to brilliant light flashes, such as approaching car headlights. Veiling glare makes it difficult for the eye to see targets between bright light sources, while dazzle glare

from oncoming headlights makes it difficult to identify the edge of a curving two-lane highway when driving at night.

Hence, this is the single most important reason why so many head-on collisions mysteriously happen precisely on dark, unlit, rural, undivided, two-lane STRAIGHT roads or on CURVES at night. (as supported by both the US NHTSA's 1999 and 2005 statistics, but not yet recognised in 2014!).

Photostress can momentarily blind drivers, although most drivers will not necessarily be aware of it. As we age matters get worse. People over 50 years are more prone to disability glare because they have increased interocular scattering, where their photostress recovery time is also increased.

It is true new LED, HID and Laser headlights are brighter, more energy efficient and longer lasting than conventional incandescent halogen headlights. They also allow owners to more easily detect road hazards, signage, cyclists and pedestrians better and at greater distances, and because of this, manufacturers claim they are much safer. Unfortunately, the fact is, they are not, because they have a much greater capacity to blind opposing drivers and therefore dramatically increase the risk of a head-on collision.

Most ophthalmologists would say night driving is a mesopic (intermediate brightness vision) rather than a scotopic (night-time vision) or photopic (daytime vision) task. It can push even normal visual systems to their limits. Visual acuity deceases with decreasing target illumination. The loss is greater the older we get. Headlight glare sensitivity also increases with aging.

In the end, there is a very "delicate optimal balance" in headlight brightness, between owner visibility and viewer (opposing driver) disability.

Laser headlights to supersede LEDs

If LED and HID headlights are bad enough, the new laser headlights are even worse. While cars with laser beams does sound like a script stolen from a James Bond movie, BMW claims the motivation to skip LEDs and go to lasers is because of energy conservation as lasers can produce about 70% more light per watt than an LED unit.

BMW claims that lasers have an illuminating power 1,000 times more powerful than LEDs, which up until recently were the latest technology. Can you believe it?

Audi's R8 has laser headlights too. Each module carries four laser diodes just 300 micrometers in diameter. They fire a blue laser beam with a wavelength of 450 nanometers (the most damaging blue wavelength in the spectrum that destroys the retina) into a yellow phosphor lens converter, generating white light with a color temperature of 5,500 kelvin.

LED bulbs (and LED TV screens etc.), have already gone to the mass market and are in the process of superseding incandescent and fluorescent lighting. But the next generation of lighting and screens may come from the laser diode. Already companies are experimenting with Laser Phosphor-based Displays (LPDs), which consist of three main components – a phosphor panel, a laser engine and a laser processor. They already boast these LPDs to have 75% lower power consumption, brilliant images, sharp text, no motion blur and near 180 degree viewing angles.

In just a relatively short space of time these laser-based lights may end up even dominating or superseding LEDs. Lasers have three main features – high intensity light, a collimated beam, and mono-chromaticity. Blue laser diodes emit extremely high intensity blue light at

445nm (the same wavelength that destroys your retina in lower-powered LEDs) through a yellow phosphor to produce white light. As the light hits the phosphor, there is a scattering due to the rough surface of the coating. Some rays come out blue, while others come out yellow – following a similar pattern to what happens with a white LED. The result is a white light no longer collimated and no longer monochromatic blue. Therefore the spectral blue spike curve in these white laser diode light sources is even worse for the retina than LEDs.

Lightmare: Ban blinding headlights

About four or five years ago an outstanding organization appropriately called, *Lightmare*, http://www.lightmare.org/ was founded by Roy Milnes and Donald Berry to fight the growing road safety issue of blinding lights which affect a driver's ability to perceive hazards. They have also prepared a petition *Ban Blinding Headlights* to be delivered to the United States House of Representatives, the United States Senate, and President Barack Obama. They aim to persuade the world regulators (NHTSA and UNECE) to limit eye-damaging intensity from headlights principally:

- High Intensity Discharge Xenon headlights (HID-Xenon) – they can cause temporary blindness.
- Misuse of brake and fog lights – contravention of highway codes.
- Over-bright daytime running lights (DRL) – the EU have set maximum brightness to 1200cd to compete with the sun – the Japanese proposed a more acceptable 200cd = bright sidelights.
- Since blinding lights have become mandatory, accidents have increased involving cyclists and pedestrians.
- January 2014 – The latest madness: Audi Quattro with laser headlights and BMW i8 laser headlights that are damaging to the eye – see EU Directive Optical Radiation 2006/25/EC Article 2(c).

They correctly claim that the authorities are allowing this "Lightmare" to escalate, and are putting the most vulnerable and less conspicuous road users at risk – pedestrians, cyclists and motorcyclists. Their petition statement is:

- *"We call on Congress to ban harsh, blinding headlights by revising Federal Motor Vehicle Safety Standard 108 to include specific language that bans the use of any light that is blinding, dazzling, distracting or otherwise causes pain and damage to the eyes of onlookers."*

On their website subsection *Lighting fundamentals* they write, "Both Xenon-HID and LEDs emit light near the eye damaging blue ultra-violet end of the spectrum and despite using a UV absorbing glass envelope (highest risk; car mechanics, coming too close to these damaging – or if you like devastating – light sources who may suffer irreversible damage) some UV light escapes. It is this "blueness" that causes unacceptable blinding disability glare, increased scattering, fogging and obscuring vision and last but not least causing undesired, avoidable chromatic aberration."

For many years all headlights from opposing vehicles have produced a tendency for drivers to shy away towards the often dark, invisible extreme edge of the road away from the median strip and also from the other opposing car, often causing disastrous results for pedestrians, cyclists and other parked vehicles. This tendency is enormously increased with high brightness headlights.

It's overly *simplistic* to just blame inattention, speed or alcohol. Other much more profound causes are involved. For example, drivers who hit pedestrians on the road or on pedestrian crossings are usually given all the blame – yet the US NHTSA's 2008 statistics actually show of the 48% of drivers and pedestrians who were tested for alcohol involvement in these fatalities, only 13% of drivers had BAC levels of .08 g/dL or higher whereas of the pedestrians involved, 36% had BAC levels of .08 g/dL or higher. So the moral of the story is, if you're a pedestrian, statistics show if you drink and walk, and if a car approaches you on a pedestrian crossing with piercingly bright laser beams at night – you're likely to get hit!

Since the requirement to use daytime lights for cars was introduced in some European countries over 20 years ago, serious motorcyclist and cyclist accidents have increased dramatically, because the benefits of motorcyclists using headlights to make themselves conspicuous has largely been lost. Headlights are not the only reason, however, for motorcyclist accidents. In the US, you are 37-times more likely to be killed on a motorbike on the road than in a car.

Unfortunately, at this stage in 2014, it seems that the Global Lighting Association's mafia cartel is still on course to unremittingly blind us all in more ways than one, no thanks to compliant, parasitical, government politicians and officials.

Of course, too, lest we forget, in the role of doing their ingenious evil work – as a little side-line perk, they are reluctantly making trillions of dollars in the process!

CHAPTER TWENTY-ONE

GLOBAL SOCIALISM:
THE GLOBAL CLIMATE GROUP & LED REVOLUTION

The Club of Rome

http://www.clubofrome.org/

The Club of Rome is a secretive, powerful British-controlled global think-tank. It was founded in April 1968 by Aurelio Peccei an Italian industrialist and Alexander King a Scottish scientist with a group of world heads and former heads of state, UN officials, diplomats, academics, scientists, bankers and business leaders at a special meeting at Academia dei Lincei, a villa in Rome.

Aurelio Peccei (1908 – 1984) is often erroneously quoted as founding the Club of Rome, but in truth it was Alexander King CMG CBE (1909- 2007) who was previously Head of the UK Scientific Mission and Scientific Attaché at the British Embassy in Washington. Following World War II, King became Secretary of the Advisory Council on Scientific Policy and personal adviser to the Lord President of the Council, Baron Herbert Morrison, a Fabian Socialist and senior British Labour politician.

Aurelio Peccei was on the International Board of the World Wildlife Fund (now the World Wide Fund for Nature) (WWF) a British-controlled front group of the European royal families and financial elite. All former presidents of the International WWF have been members of European royal families or Anglo/Dutch multinationals. Prince Bernhard (a former Nazi) was the first WWF president (1961-1976). John Hugo Loudon, knighted by both the British and Dutch royal families, a top ranking official with Royal Dutch Shell, was president (1976-1981). Prince Philip, the Duke of Edinburgh, was president of WWF (1981-1996) and still is emeritus president.

The current Secretary General of the Club of Rome is Ian Johnson who was appointed to the position in 2010. Johnson spent 26 years at the World Bank and for his last eight years there was Vice President of Sustainable Development. Prior to joining the World Bank, he was an economist with the British Government.

The Club of Rome was founded to fulfil the mission "to act as a global catalyst for change through the identification and analysis of major world problems facing humanity."

The ultimate goal of the Club of Rome was to work towards uniting all nations together socially, religiously and politically in a contrived war against an artificial "mortal enemy" and "common threat" (global warming and climate change) and through the UN, gradually abolish the national sovereignty of nations, and then set up a New World Order one world government with most of the world being controlled by a handful of giant multinational corporations. Since 1 July 2008, the organization has its global headquarters at Winterthur, Zurich, Switzerland.

In 1991, the Club of Rome published ***The First Global Revolution,*** in which they stipulated, not any rogue country or even a religion, but an "outside enemy" had to be artificially created as a scapegoat to bring all nations and religions together to form a One World

[Luciferian] Religion and One World Government. In this radical report they noted, "In searching for a new enemy to unite us, we came up with the idea that pollution, the threat of global warming, water shortages, famine and the like would fit the bill … All these dangers are caused by human intervention … and thus the real enemy, then, is humanity itself … humanity requires a common motivation, namely a common adversary in order to realize world government. It does not matter if this common enemy is a real one or… one invented for the purpose."

This is what all the deceptive lies about global warming, climate change and sustainable development are all about. Ultimately, it is the full implementation of <u>global socialism</u>.

Mikhail Gorbachev, former leader of the USSR, and still an avowed Leninist and Communist said, "The emerging 'environmentalization' of our civilization and the need for vigorous action in the interest of the entire global community will inevitably have multiple political consequences. Perhaps the most important of them will be a gradual change in the status of the United Nations. Inevitably, it must assume some aspects of a world government."

Gordon Brown, former British Prime Minister and leading Fabian Socialist said, "A New World Order is required to deal with the Climate Change crisis."

The Climate Group

Previously, in chapter one, the author touched upon this enormously powerful non-profit organization called The Climate Group. In reality, it is a tight coalition of the world's most powerful fascist banks and corporations, founded in 2004, headquartered in London – that is, among many other things, overseeing the world's transformation to LED lighting through *The LED Program*.

Powerful City of London Corporation banks and corporations run and fund it, such as HSBC, Standard Chartered, Swiss Re, Credit Agricole, and most of the world's biggest multinational corporations partner with it. This includes companies such as Bloomberg, BT Group PLC, CBRE, CECEP, Dell, Duke Energy, Goldman Sachs, Hewlett Packard, IKEA, IWC Schaffhausen, Landsea, News Corporation, Nike, Philips, Proctor & Gamble, Suzlon etc.

Various governments and state governments are also members, such as, State of Rio de Janeiro, Tasmanian Government, Province of Ontario, Province of Quebec, Region of Ile-de-France, Scottish Government, State of Baden-Wuerttemberg, State of Bavaria, State of California, State of New York, State of Sao Paulo, State of South Australia, State of Upper Austria, Welsh Assembly Government, Greater London Authority, City of Adelaide, City of Chongquig, City of Guiyang, City of Hangzhou, City of New York, City of Sydney, City of Toronto, etc.

Many other organisations are also members such as the Foundation Prince Albert II de Monaco, New Cities Foundation, United Nations Global Compact and the World Bank.

Even just a cursory look at these giant banks, headquartered in London, such as Hong Kong Shanghai Banking Corporation (HSBC) and Standard Chartered Banking Corporation, should throw up some glaring "red flags" about what they are really doing through implementing Sustainable Development under the cloak of The Climate Group.

These fraudulent banks, even right from their very beginnings, have been consistently implicated in bribery and corruption, and were primarily established as criminal organisations for the British aristocracy to launder opium drug money during the first and second opium wars with China, financing drug syndicates, and creating untold misery for

millions in the process. So if they claim anything at all is good for you, at best, you need to take it with a very big grain of salt, and this includes anything The Climate Group plans involving The LED program.

The Climate Group actually claims on its website http://www.theclimategroup.org/ , **"Our goal is a prosperous, low carbon future for all."** May we ask, what exactly do you mean by "all" – and "prosperous for whom?"

The Climate Group is a Religion

Believe it or not, they actually state their pagan beliefs and lies here:

http://www.theclimategroup.org/who-we-are/our-members/our-members-principles/

The Clean Revolution

Coordinated by The Climate Group, *'The Clean Revolution'* was launched first in September 2011 at Climate Week NYC, then officially at the Rio+20 Earth Summit in Brazil in June 2012. *The Clean Revolution* (similar to the communist Bolshevik Revolution, but much more subtle!) is a global partnership of international statesmen and governments, business leaders and corporations, thinkers – who are all working together to produce a swift, massive scale-up of clean energy and infrastructure, and of smart technologies and design, with the aim of reducing current global emissions by 80% by 2050.

http://thecleanrevolution.org/what-is-the-clean-revolution/

The Clean Revolution: Ambassadors

http://thecleanrevolution.org/ambassadors/

To help the reader appreciate the incredible power that The Climate Group has through The Clean Revolution (just one of its many programs) it is interesting to take a look at some of the Revolution's key people.

The Climate Group has appointed ten Clean Revolution Ambassadors (green evangelists) to expand the "clean energy" propaganda campaign at the highest levels to businesses and governments around the world. They are:

1. **Bob Inglis:** is the Executive Director of The Clean Revolution. He is also Executive Director of the Energy and Enterprise Initiative based at George Mason University in Fairfax, Va. Inglis was first elected to the US Congress in 1992. He spent 6 years in the House (1993-98), but lost his bid for re-election in June 2010.
2. **Brigadier General Stephen A. Cheney:** General Cheney is the Chief Executive Officer of the American Security Project (ASP). He was a military fellow at the Council on Foreign Relations in New York City, where he is a member.
3. **Cecil B. Wilson MD MACP:** Dr Cecil B. Wilson, an internist from Winter Park, Florida, USA, was inaugurated as **President of the World Medical Association (WMA)** in October 2012 at its General Assembly meeting in Bangkok, Thailand. Dr Wilson is also Chair of the American Medical Association delegation to the WMA. He has served as a member of the WMA committees on Medical Ethics, Finance and Planning and Socio-Medical Affairs. In addition, Dr Wilson has served for the past three years as a private sector advisor to the United States Delegation to the World Health Assembly at the World Health Organization in Geneva.
4. **Deborah Fikes:** Deborah Fikes currently serves as the Representative to the United Nations for World Evangelical Alliance (WEA) one of the world's largest religious representative bodies consisting of over 600 million constituents globally. She also serves as

an Executive Advisor to World Evangelical Alliance and is a board member of the National Association of Evangelicals (NAE). Deborah was named by Concerned Women of America as an Evangelical Woman of the Year in 2005. She is an advisory board member for Harvard Medical School Center for Health and Global Environment and a sister of the Planet Ambassador for Oxfam. As a former spokesperson and advisor for Human Rights advocacy of the Ministerial Alliance of Midland, Texas, she led Protestant, Catholic, and Evangelical churches in the hometown of President George W. Bush to network with their national and international counterparts to promote international religious freedoms and human rights advocacy efforts.

5. **Dr Andrew Steer:** Dr Andrew Steer is the President and CEO of the World Resources Institute (WRI). Andrew joined WRI from the World Bank, where he served as Special Envoy for Climate Change since 2010. In this role, he guided Bank Group efforts on climate change in more than 130 countries, oversaw the US$7 billion Climate Investment Funds, and led the World Bank's engagement on international climate negotiations. He was a member of UN Secretary-General Ban Ki-moon's High Level Panel on Sustainable Energy for All and on the B20 Board on Green Growth. From 2007 – 2010 he served as Director-general and member of the Management Board at the UK Department of International Development (DFID) in London. He was also Director and chief author of the 1992 World Development Report on Environment and Development, the World Bank's Flagship report to the Rio Earth Summit.

6. Dr Joyce Brown: Dr Brown is President of the Fashion Institute of Technology (FIT), a specialized college of art and design, business and technology of the State University of New York. Appointed in 1998, she is the college's sixth president. She participated in the 2009 Clinton Global Initiative commitment to sustainability. In 2010, Dr Brown launched a pioneering master's degree program in Sustainable Interior Environments and recently introduced a minor in Sustainability and Ethics. She established a college-wide Sustainability Council which promotes dialogue, campus-wide activities and manages a grant program for related projects.

7. HSH Prince Albert II of Monaco: Albert II, Sovereign Prince of Monaco, is the head of the House of Grimaldi and the ruler of the Principality of Monaco. His Serene Highness established the Prince Albert II Monaco Foundation in 2006 to continue the Principality's legacy of environmental stewardship and its commitment to conserve the world's environment and combat climate change. It has opened chapters in France, Switzerland, the UK, Italy, Germany, Canada and USA.

8. Niklas Zennstrom: Niklas Zennstrom is an entrepreneur and investor, best known for co-creating Skype, where he held the position of CEO from Skype's inception until September 2007. In 2005, Skype was sold to eBay Inc. for $3.1 billion. In 2009, Mr Zennstrom was part of the investment consortium that bought Skype from eBay and he has now re-joined the Skype board. Prior to Skype, Mr Zennstrom co-founded and served as CEO of Kazaa, which became the world's most down-loaded internet software in 2003. He currently sits on the boards of Fon, Jolicloud, Rdio and Scype. Niklas Zennstrom co-founded Zennstrom Philanthropies, where he is actively involved in combating climate change.

9. Steve Westly: Prior to founding The Westly Group, Steve Westly served as the Controller and Chief Fiscal Officer of the State of California – the world's eighth largest economy. In the 2008 election cycle Mr Westly served as a California co-chair and a National Finance Committee member of the Obama for America campaign. He currently serves on the Secretary of Energy's Advisory Board as a representative for the venture capital industry.

10. Tulsi Tanti: Tulsi Tanti is the founder, Chairman and managing Director of Suzlon Energy Limited, the third leading wind energy group in the world with 12.3% of global market share, operating in 21 countries, with revenues of over $5 billion.
He was awarded 'Champion of the Earth 2009' by the United Nations Environment Program, 'Hero of the Environment' by *Time Magazine* and 'Entrepreneur of the Year 2006' by Ernst & Young.

LIGHTING THE CLEAN REVOLUTION: The rise of LEDs and what it means for cities

Remember the Club of Rome's 1991 radical report, *The First Global Revolution,* about searching for a new "global enemy" to unite the world?

In June 2012, linked to The Climate Group's initiative called *The LED Program*, a new strategic report was published including their plans to transform the whole world to LED lighting called, *Lighting The Clean Revolution: The rise of LEDs and what it means for cities.*

This was coordinated by The Climate Group and funded by HSBC and Philips. The full report of the plan can be viewed here: www.thecleanrevolution.org/ report web1.pdf or google, 'The rise of LEDs and what it means for cities.'

A brief summary of the lengthy report is titled, '*Infographic – Lighting the Clean Revolution: The rise of LEDs and what it means for cities,'* can be downloaded or seen here: http://thecleanrevolution.org/news-and-events/news/infographic-lighting-the-clean-revolution-the-rise-of-leds-and-what-it-means-for-cities

Here are the key points:

(1) "At Rio+20 we launched the game-changing report *Lighting the Clean Revolution: The rise of LEDs and what it means for cities*, which looks at the economic and efficiency benefits of low carbon LED lighting.
(2) "LEDs are bringing a lighting revolution to our cities not seen since the days of Thomas Edison. The technology represents as much of a step change as the move from candles to incandescent lamps in the 19th century.
(3) "Lighting accounts for about 20% of the world's electricity consumption.
(4) "The 6% of global greenhouse gas emissions attributed to lighting is equivalent to 70% of the emissions from the world's passenger vehicles.
(5) "We learned that LEDs achieve the expected 50% to 70% energy savings, and reach up to 80% savings when coupled with smart controls.
(6) "LED penetration into the general lighting market is expected to rise from 7% today to 64% by 2020, reaching at least US$70 billion in value per year.
(7) "LED prices are set to fall by more than 80% by 2020, soon it will save billions in energy and maintenance costs across the globe.
(8) "If an average of just 40% energy savings were unlocked by LEDs across the world, it would save … $129 billion in electricity cost, the total global wind and photovoltaic markets combined … and … 670 million tons of CO2, released by 642 coal power plants.
(9) "If LEDs reach their full potential, they could almost single-handedly eliminate lighting as a major source of global emissions.'

But they conveniently forgot point number (10) – that their white LEDs are going to flood the whole world with blue light that eventually is going to send everyone blind! And the truth is – they are liars and they know it!

The Global Lighting Association's white paper, *Optical and Photobiological Safety of LED, CFLs and Other high Efficiency General Lighting Sources* is *their "international position statement on the safety of LEDs"* which can be viewed or downloaded from their library at www.globallightingassociation.org .

Note that there are absolutely no names of any individuals, no references at all to any specific individual scientists, doctors or authors in the entire, extensive document.

They warn:

- *"While GLA members have made every attempt to ensure the accuracy of the information contained herein, it does not accept responsibility or liability for any usage of this information."*

This deception is repeated again in The Climate Group's report, "*Lighting The clean Revolution: The rise of LEDs and what it means for cities,"* and reads;

- *"DISCLAIMER: This publication has been prepared for general guidance on matters of interest only. And does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication and to the extent permitted by law. The authors and distributers do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting or refraining to act, in reliance on the information contained in this publication or for any decision based on it. © 2012 The Climate Group"*

Bear in mind these are the primary "LED SAFETY POSITION STATEMENTS" from international big business and the global lighting industry (representing over 5,000 multinational lighting companies) for the world!

Guide for Responsible Corporate Engagement in Climate Policy

http://www.theclimategroup.org/what-we-do/publications/guide-for-responsible-corporate-engagement-in-climate-policy/

In November 2013, The Climate Group, in partnership with World Resources Institute, the World Wide Fund for Nature (WWF), Ceres, CDP and the UN's Caring for Climate (which is made up of the UNGC, UNEP and UNFCCC), developed an extensive 60-page document called the ***Guide for Responsible Corporate Engagement in Climate Policy*** to provide companies around the world with practical guidance for engaging constructively in climate policy debates. For the first time, companies will have a guide to manage and report on their direct and indirect influences on climate policy, sustainable development commitments, emission reductions and efficiency improvements in line with "communist" United Nations guidelines.

(Yes, the United Nations is a "communist" organisation. Its charter was copied almost word for word from the U.S.S.R. Soviet Constitution by Leon Pavlovsky, a Russian Jew and employee in the US State Department).

Note: There is a disclaimer on this report too. It reads:

- *"DISCLAIMER: The views expressed in this publication are not necessarily those of the United Nations (including the United Nations Global Compact, the Secretariat of the United Nations Framework Convention on Climate Change and the United Nations Environment Programme), World Resources Institute (WRI), CDP, WWF, Ceres, and The Climate Group.*

The inclusion of company examples in this publication is intended strictly for learning purposes and does not constitute an endorsement of the individual companies by the United Nations and authors of this report. The material in this publication may be quoted and used provided there is proper attribution."

The report was the focus of the *Caring for Climate Business Forum,* November 19-20 2013, at the 1992 United Nations Framework Convention on Climate Change (UNFCCC) Conference COP19 (Conferences of the Parties) held in Warsaw, Poland from 11 to 23 November 2013. Key decisions adopted at this conference included decisions on further advancing the Durban Platform, the Green Climate Fund and Long-Term Finance, the Warsaw Framework for REDD Plus, the Warsaw International Mechanism for Loss and Damage and other decisions.

Durban Platform for Enhanced Action, December 2011

The *Durban Platform for Enhanced Action* document was released on December 10, 2011, at the United Nations Framework Convention on Climate Change in Durban, South Africa. The meeting resulted in the decision to begin forging a new treaty in 2012, to be completed by 2015, and coming into effect by 2020. It established the plan to create a new international *Green Climate Fund* alongside the EU and a number of other countries agreeing to emissions cuts under the Kyoto Protocol.

This is why the Global Lighting Association and The Climate Group, and many other organizations as well, are frantically working towards implementing most of their goals by 2020.

The LED Mafia: Coming to a street near you

As a result of the collusion between The Climate Group, the UN and the Global Lighting Association cartel, a massive program to transform the whole world to LED lighting, much of it to be completed by 2020, has urgently begun. A list of major cities around the world where LED street and park lights have already been, or presently are being, installed is here:

http://en.wikipedia.org/wiki/LED_street-light http://www.theclimategroup.org/what-we-do/programs/led/

The lighting companies report that city councils, local governments and most people around the world are entirely happy with this new, revolutionary LED lighting, but this certainly is not unanimous at all. The experience in the UK provides a good example of what is happening. Even many, quite ordinary members of the public are perceptive enough to feel something is amiss, even though they do not quite understand the full implications of it.

On 22 April 2014, the (UK) *Mail Online* published an exceptional article by a very perceptive author, Alice-azania Jarvis*, 'Coming to a street near you – the lights that keep you awake and could make people ill.*' http://www.dailymail.co.uk/news/article-2609957/Coming-street-near-lights-awake-make-people-ill.html

This author has provided an excellent summary of what is really happening with LED street lighting in Britain, and notes:

- "Councils claim LED lights use less energy than conventional sodium bulbs.
- Hounslow council agree to dim lights after complaints from residents.
- But the local authority won't replace the 16,000 lights across the borough.
- Bury council in Manchester plan to change 11,000 lights by 2017.
- Similar schemes underway in parts of Blackburn, Birmingham and Glasgow.

- However, scientists claim that LED lights can disrupt sleep patterns.
- LED lamps can also leave some patches of street and pavement almost entirely unlit – and potentially vulnerable to criminals."

"When Andy Richards saw a dazzling light beaming through his bedroom window, his first thought was an alien invasion. 'It was like The Day of the Triffids,' he says. 'This is brilliant white glare.' Opening his curtains, he realised the source was more mundane. It came from the street light outside the two-bedroom home he shares with his wife Kate in Chiswick, West London… So desperate have the couple become, they have taped a large piece of black cardboard to their windows. 'It's like a World War II blackout,' says Andy, a 61-year-old record producer, who has lived in the street for 25 years. 'It was the only thing we could do. We've had three miserable weeks without sleep.' …However, despite the protestations of the Richards' and their neighbours, the council won't be reconsidering its plan to replace almost 16,000 lights across the borough. And Hounslow isn't the only council eagerly embracing LED street lights. Across Britain, local authorities have fallen for the new 'energy efficient' lighting. Bury council in Manchester has announced plans to change 11,000 street lights on 1,850 side-roads throughout the borough by 2017."

"In Llandough, Wales, locals have organised a petition to have their recently installed LED street lights removed and replaced with the originals. Last year, Bath council was forced temporarily to stop replacing the city's street lamps with LEDs and hold a public consultation, so vociferous were complaints after the first 2,000 were erected. And in Trafford, Manchester, residents have threatened to take their council to court if it continues with plans to replace all its 27,000 street lights. But why are the objections so strong? If the lights can, as Hounslow council promises, be dimmed if necessary – and if they use less energy, save money and reduce crime – what is wrong with the new system?

Rather a lot, it turns out. Because, it seems that in their rush to embrace the new 'green' technology, Britain's councils have ignored several serious health issues. Studies have indicated that LED lights disrupt sleep by suppressing the body's production of melatonin, a hormone which governs our sleep patterns. All light consists of different colour combinations, and visible light falls on a rainbow-like spectrum, which extends from red to blue. Natural light combines all the colours of the spectrum, but the light given off by LEDs is overwhelmingly blue.

Too much 'blue light' suppresses our biological clock, resulting in lower-quality sleep. This in turn increases the likelihood of heart disease, obesity and diabetes. It damages the immune system and leaves sufferers vulnerable to depression and anxiety.

It has even been suggested that too much exposure to LED light causes blindness. Last year, a Spanish study suggested that the light emitted by LED bulbs can damage cells in the retina. By way of illustrating just how potent their glare can be, consider that LED lights are generally banned in art galleries because they bleach the paint on works on display.

'They are dangerous and potentially damaging,' says Simon Nicholas, a 53-year-old chartered engineer who successfully campaigned to stop LED lights being erected in Trafford until further research is done. 'Local councils have embraced this technology, without looking into the health concerns. All they care about is the bottom line.'"

"Roderick Binns, 65, who lives a few doors away from Andy and Kate, says his council bills have increased. 'It doesn't feel as though any reduction is being passed on.' In fact, the initial cost of installing LED lamps is remarkably high. Replacing Trafford's lights would cost

£9.3 million. Although in some instances the bulbs can be installed on top of posts that are already in place, in others installing LED involves ripping down and replacing the entire lamp frame, at a cost of about £500 a unit.

Essex County Council was recently forced to halt plans to replace its lamps when it emerged that the work involved would cost a staggering £31 million. Even with the energy savings the lights should bring, it could take 20 years for installation costs to be recouped.

Simon Nicholas, who campaigned against the lights in Trafford, says: 'If you were saving energy at home, would you buy a new £500 unit or put a low-watt bulb in? Why can't they just do that?"

"…In Manchester, the lights have been nicknamed 'UFO lamps' because of their unforgiving glare. Given that some of Britain's lampposts date back to the 19th century, ripping them down in large numbers is a rather poignant loss to local historians. As Simon Nicholas puts it: 'You wouldn't rip down historic statues. It's vandalism.'

'It's a matter for central government – at the moment nobody's paying attention and nobody's stopping this. It's worrying.' Until then, it will be down to determined home-owners like him to protect their streets from the invasion of the UFO lamps."

So next time you are told by your local media puppets or local politicians that you have to give up more and more of your personal liberties and freedoms for the sake of "Climate Change," or "Global Warming" in the "LED Revolution" that is supposedly threatening you – remember, you are being lied to by experts, because the truth is, it's all about creating a New World Order police state and has absolutely nothing to do with the weather or CO2 emissions at all.

CHAPTER TWENTY-TWO

LASER DIODES (LDs): THE COMING REVOLUTION TO REPLACE LEDs?

Coherent light emission from a semiconductor (gallium arsenide) diode (the first *laser* diode) was demonstrated in 1962 by two US research groups led by Robert N. Hall at the General Electric Research Center and Marshall Nathan at the IBM T.J. Watson Research Center. The first visible wavelength diode was demonstrated by Nick Holonyak, Jr. later in 1962. GaAs lasers were also produced in early 1963 in the Soviet Union by a team of scientists led by Nikolay Basov.

Today laser diodes have a huge array of uses and are the most common lasers manufactured. They are made in the billions and are used in such things as fibre optic telecommunication systems, measuring instruments, industrial heat treating, barcode readers and laser pointers. Infrared and red laser diodes are common in CD, DVD players and CD-ROMS. Violet lasers are used in HD DVD and Blu-ray technology.

White light laser diodes

At the heart of global solid-state lighting (SSL) is still the light-emitting diode (LED), with the standard white light SSL being the phosphor-converted light-emitting diode (PCLED) in which high brightness InGaN blue LEDs are combined with one or more wavelength-down-converting phosphors to produce composite white light. Despite this success, blue LEDs still have significant performance limitations, especially in non-thermal drop in efficiency with increasing input power density called “efficiency droop” which limits operation to relatively low input power densities, contrary to the desire to produce more photons per unit area of the LED chip.

Laser diodes (LD) producing high brightness white light are already now being manufactured and being used in car headlights. But the development of laser diodes to efficiently commercially produce white ambient lighting has been much slower. The University of California Santa Barbara (UCSB) for a number of years has been working on this. Commercial ‘white’ light-emitting diodes (LEDs) generally use a blue or near ultraviolet (near UV) III-nitride LED to excite a phosphor target that converts the relatively narrow spectrum of the LED into white light.

UCSB believes that using laser diodes instead of LEDs could have a number of advantages such as avoiding the “efficiency droop” problem of nitride semiconductor LEDs at high current injection. Further, the use of laser diodes, allow better thermal management, with the exciting laser diode being separated from the phosphor target material, due to the higher directionality of laser light. In LEDs, self-heating effects cause shifts in wavelengths that alter the collar rendering quality, along with reducing the efficiency.

Laser diodes (LDs) are very similar to light-emitting diodes (LEDs). In a provocative article, ‘*Forget LED bulbs – the future of interior lighting is lasers,’* Christopher Mims http://qz.com/146761/forget-led-bulbs-the-future-of-interior-lighting-is-lasers/ writes:

"Steven DenBaars, a research scientist at UCSB, has been working on LED lights for 20 years… Debaars is already onto the next big thing: Replacing a substantial portion of indoor lights, and the archaic bulb and socket infrastructure on which they depend, with lasers...

The common ground is LED technology – it turns out that the kind of lasers Denbaars is working on are based on existing light emitting diodes, and are called "laser diodes."

"It's very similar to an LED light-bulb," says DenBaars. "It's the same materials, but you put two mirrors on either side of the LED and it breaks into a laser. Once you get reflection back and forth, you get an amplification effect, and it goes from regular emission to stimulated emission – it's like an avalanche."

The best laser diodes are about as effective at turning electricity into light as a store-bought LED, but with one major difference: You can pump more than 2,000 times as much electricity into a laser diode. In theory, that means per square centimetre, a laser diode can produce 2,000 times as much light.

"Simply replacing the light emitting diodes in a typical LED bulb with a laser diode wouldn't work. For one, this hypothetical laser light-bulb would catch on fire from all the waste heat it would generate. Also, it would produce an ungodly amount of light, more than enough to blind anyone who looked at it. (Imagine a sphere made out of lasers shooting in every direction at once, like some kind of sci-fi weapon.) Rather, DenBaars imagines using just a handful of tiny but powerful lasers, and then reflecting their light into fiber optic cables and other types of light-transmitting plastic that could take that light and evenly distribute it into a warm, diffuse glow… Other forthcoming applications for laser illumination include IMAX movie theatre projectors, televisions and computer monitors, head-mounted displays like Google Glass, and miniaturized "pico" projectors…

The problem is nearly all buildings on earth that have electricity also have conventional light-bulb sockets. That's why the first LED light most people will own will be shaped like a bulb, even though squeezing essentially flat LED lights into a round shape is absurd and leads to problems like overheating. But laser lights could solve the problem of how to bridge the gap between traditional light sockets and more radical configurations of new lighting technologies.

That's because with just a few point sources of laser light installed in a building, their illumination can be redirected through a structure via plastic fiber optic cables that could be run along ceilings and around corners, just as the cable company runs its wires into buildings and through rooms without having to tear holes in walls or interface with the electrical system of a building… DenBaars points out that it would even be possible to channel light through "free space," without any fiber optic cables at all.

That is, a central laser light source could shoot across the ceiling or down a hallway, into some kind of glass or plastic waveguide, and from there it would illuminate an entire room. It's a weird concept, but when you eliminate the light-bulb, you end up with ideas that Thomas Edison never even dreamed of."

Only one problem: Blue light toxicity from laser diodes (LDs) is much worse than even LEDs

Unfortunately, as revolutionary and amazing as they are, both commercial 'white' light-emitting diodes (LEDs) and laser diodes (LDs) substantially use a blue or near-ultraviolet (near-UV) wavelength diode to produce their white emissions.

Although it has been possible for some time to deliver efficient, powerful output from a laser diode, efficiency plummets at longer wavelengths, similar to the LED.

This pronounced weakness, known as the "*Green Gap*" in optical physics, occurs because, as more indium is added to the InGaN quantum well to push its emission to longer wavelengths, two unwanted effects occur: material quality diminishes; and there is an increase in the strength of the internal electric fields in the LED, which pull apart electrons and holes and impair efficient radiative recombination.

So unless there is a massive change in the basic physics and design of all 'white' light-emitting diodes (LEDs), (OLEDs) and laser diodes (LDs) – that presently all emit a sharp spike of damaging blue light in their spectral emissions – if ever laser diodes arise to replace LEDs, because of their increased intensity, they will produce even greater long-term irreparable damage to the retina.

http://phys.org/news/2013-11-laser-diodes.html

http://www.semiconductor-today.com/news_items/2013/OCT/UCSB_211013.shtml

http://www.enlightenmentmag.com/trends/laser-vs-led

http://en.wikipedia.org/wiki/Laser_diode

CHAPTER TWENTY-THREE

THE FINAL PROGNOSIS: CIGARETTE SMOKING & LEDs

Almost in every respect, what has happened previously in the tobacco industry, involving vast numbers of unprincipled, corrupt businessmen, doctors and scientists, is now identically being replicated in the LED lighting industry.

The only difference now between the two is that while the predominant effect of smoking is lung cancer – the effect from blue light toxicity from LEDs will likely be blindness. Moreover, if anything, LEDs are much worse. You can see, sense, smell, breath and cough smoke, but you can't see or feel UV or blue light emissions in white light bulbs or LED back-lit screens destroying your own or your child's retinas until it is too late to do anything about it.

UV and blue light hazard is an extremely subtle, stealthy, silent and insidious robber and killer, much more so than smoking.

As previously mentioned in chapter eighteen, blindness is extremely traumatic and more often than not, especially in developing countries, is a literal "death sentence." To possess good eyesight, and then lose it later, is particularly traumatic and nasty. In many poorer countries, after people go blind, they usually die within ten years. It is a terrible infliction and well worth working towards helping people avoid it wherever possible.

LED white lighting and LED screens have only been mass-produced in most world markets for less than 5 years now and their potential damaging effects haven't yet come to full fruition or been widely recognised by the general public, or indeed the global scientific or medical community, apart from a very few. Will people wake up in time? The effects may arrive much sooner than we think.

When we look at how incredibly long the global medical and scientific community have reluctantly taken to accept that tobacco smoking actually damages human health – now over 400 years since Pope Urban VII and King James I first issued their denunciations against it – over a hundred years since smoking was first recognised to be hazardous by the American physician Dr Isaac Adler in 1912 – over 80 years since German Nazi physicians during the Third Reich widely recognised the serious damaging effects of smoking on human health – it doesn't auger well for the modern world's scientific and medical establishment's ability as a group to universally see or accept LEDs are equally or more damaging to human health than tobacco. Therefore any major early resolution to the damaging effects of LEDs from this group, because of their vested interests, would seem to be much more daunting.

Yet still, today, cigarettes are the most traded item on earth, and cigarette manufacturers haven't been banned and are still making billions. It's really a complete disgrace, and a sad indictment on the interminable greed of much of the human race.

To fully appreciate how difficult it is (and will continue to be in the foreseeable future) to publicize the serious dangers of LEDs, including this publication and others like it, it is worthwhile taking a short glimpse at what has unfortunately happened in the tobacco and cigarette industry, involving the endemic collusion between it, big business, corrupt doctors and scientists.

Simply enormous sums of money are involved with global lighting now, much more than tobacco ever was. But the lies, fraud, bribery, moral depravity, treason and deceptive tactics are the same. The following is just a short expose of what has happened in the tobacco industry through its chequered history – showing how it has deviously plotted with the banking, pharmaceutical, medical and scientific mafia – and is now, once again, being repeated with LED lighting:

THE GLOBAL COLLUSION BETWEEN FINANCIAL INSTITUTIONS, PHARMACEUTICAL CARTELS, MEDICAL ASSOCIATIONS AND CIGARETTE COMPANIES:

Just a handful of giant financial behemoths epi-centered in the City of London control the financial world.

City of London Corporation

First, a little bit about global finance. While most people are completely oblivious of the fact, only one corporation now effectively controls the whole world. It is called the "Square Mile" or officially the CITY OF LONDON CORPORATION.

http://en.wikipedia.org/wiki/City_of_London_Corporation (not the greater London city area, but a city within a city inside the old Roman walls of London).

Within the Corporation are TWELVE GREAT LIVERY COMPANIES http://www.intriguing-history.com/list-of-great-twelve-livery-companies/ with their many subsidiaries, owned by a mere handful of rich and powerful families in London headed by the "FASCIST" British Sovereign, who directly or indirectly controls the entire physical wealth and assets of the whole world.

Yes, the British Monarchy and aristocracy may claim to be good Protestants, but the reality is much different. Today, the Sovereign is no less a fascist dictator than the emperors were in ancient fascist Rome, Mussolini in fascist Italy, or Hitler in fascist Nazi Germany. To advertise this global fascist power for those in the "know", the current British Sovereign, Queen Elizabeth II, actually has the sons of Neptune carrying two Roman **fasces** (the ancient supreme symbol of fascism) mounted on the rear of her Gold State Coach. In turn, representative of her global dictatorial power and reign over the U.S. Government, copies of these two **fasces** are mounted on the rear wall behind the Speaker's Rostrum in the U.S. House of Representatives in Washington, D.C.

There are also three demon-deities that rule the City. The first is the RED DRAGON (epithet of Satan in the Bible) who presides over the city. He is the chief heathen deity and emblem of the City, and each year "Dragon Awards" are presented in his honour http://www.dragonawards.org.uk/ where he is accompanied by his two demon guardians, GOG & MAGOG http://www.lordmayorsshow.org/history/gog-and-magog (prophesied in the last days to deceive all nations in the four corners of the earth, and to prepare the world for the great battle at Armageddon in northern Israel. Revelation 20:8).

Twelve Great Companies

In turn, these powerful ***Twelve Great Companies*** with their many subsidiaries control all the major banks and corporations throughout the world, including the Bank for International Settlements in Switzerland that controls all the reserve banks in each country, the IMF, World Bank and US Federal Reserve.

These Twelve Great Companies (originally Roman Catholic but now all Protestant) and banks (mainly Jewish) in turn, control most governments, the EU and UN, and the pharmaceutical

and medical companies, cigarette manufacturers and lighting manufacturers as well. They also control the global media so most people never know what's going on behind the scenes or how they're being mind-controlled. Theoretically at least, the ultimate aim is to have just ONE CORPORATION and these TWELVE GREAT COMPANIES rule the world.

It's quite ingenious really, especially for a devious gang of apostate Jews and Protestants – who seem to have contracted amnesia, forgotten how Christ overthrew the tables of the money changers and cast them all out of the temple for making it a den of thieves! (Matthew 21:13). Of note, it was only *after* Christ expelled these greedy misfits from the temple that the blind and lame were finally able to come to him and be properly healed! (Matthew 21:14). Perhaps, ultimately, this will happen again, prior to eliminating the blue light hazard from LEDs!

The Big Four British Financial Groups:

In chapter twelve, it was explained how these big Anglo/American banking groups control the global pharmaceutical and medical industries. A quick recap of this information helps reveal how the tobacco industry is similarly controlled as well.

If one takes a look at the eight largest U.S. financial institutions that control both the United States and much of the rest of the world (JP Morgan, Wells Fargo, Bank of America, Citigroup, Goldman Sachs, US Bancorp, Bank of New York Mellon and Morgan Stanley etc.) it becomes clear that they are majority controlled by just ten shareholders or less, and on virtually all occasions those shareholders include: **BlackRock, State Street, Vanguard and Fidelity.** There are others, but these are the "big four" and they also control the vast majority of European companies too. While most people think these enormous financial groups are American, the truth is they are all financial vehicles directly or indirectly controlled from the City of London Corporation.

The Vanguard Group and BlackRock Inc.:

To briefly use two of them as an example.

Vanguard Group, founded on 1 May 1975, is an enormous investment company based in Malvern, Pennsylvania, that manages over $2 trillion in assets worldwide. It is the third biggest provider of exchange-traded funds in the US. Vanguard is owned by its clients, who just happen to be largely London-controlled financial institutions and pension funds.

BlackRock Inc., founded in 1988, is a New York institutional investment management corporation and is the world's largest asset manager. In 2013, it had over $4.4 trillion in assets under management, revenue of $10 billion and total employees 11,500.

It owns about 1300 of the largest companies that trade on the NYSE, AMEX and the Nasdaq.

Tobacco Companies

Vanguard Group has major shareholdings in over 5667 companies. The top ten companies it had major shareholdings in as at early 2014 were: 1) Royal Dutch Shell, 2) Nestle Sa, 3) Roche Holding AG, 4) Novartis AG, 5) HSBC Holdings plc, 6) BHP Billiton Ltd, 7) BP plc, 8) Total SA, 9) Toyota Motor Corp., 10) Samsung Electronics Co. Ltd.

Today the biggest tobacco company in the world by volume is China National Tobacco Company owned by the Chinese Government (which indirectly is controlled by British banks such as HSBC and Standard Chartered).

The rest of the world is dominated by only five firms, in alphabetical order; Altria, British American Tobacco (BAT) (that holds a 42% stake in Reynolds American, Inc.), Imperial

Tobacco, Japan Tobacco and Philip Morris International. Founded in 1902, British American Tobacco, headquartered in London, is the world's second largest tobacco company after Altria Group, formerly Philip Morris International.

The company in 2013 had revenue of £15,260 billion and 55,000 employees. (Yes, they are still selling plenty of cigarettes in spite of the overwhelming evidence proving the damaging health effects of them).

BlackRock Investment Management (UK) Ltd

Today, BlackRock is also the major shareholder in British American Tobacco, and one of the directors of British American Tobacco, Kieran C. Poynter, has served on the Board of the International Business Leaders Forum, headed by Prince Charles, that controls the Sustainable Development and Climate Change deception and ethical policies of virtually every major bank and corporation in the world.

Previous chapters have looked at some of the big light-bulb and pharmaceutical companies, however it's interesting to recap some of their details, and see how they are in turn controlled by these "big four" Anglo/American financial groups.

Vanguard Total International Stock Index Investment: and Vanguard Developed Markets Idx Admiral, Vanguard European Stock Index Investment, BlackRock Global Allocation Inv B, Fidelity ® International Discovery, Fidelity Spartan ® International Idx Inv, are among the top twenty shareholders in the giant German multinational, light bulb, electrical engineering medical supplies manufacturer Siemens AG. In fact, Vanguard Total International Stock Index Inv is the **biggest shareholder in Siemens**.

In turn, both British-controlled Vanguard Group Inc and BlackRock Fund Advisors are among the top ten controlling shareholders in the Dutch electrical giant and light bulb manufacturer, Philips Lighting – whose senior executives, just happen to control the Global Lighting Association mafia representing over 5,000 global multinational lighting manufacturing companies that are flooding the world with LEDs.

Roche Holding AG and Novaris AG: British-controlled, Anglo/American **Vanguard Group is also a major shareholder in both Roche Holding Ag and Novaris AG**, the two giant Swiss multinational pharmaceutical companies.

Roche Holding AG, founded in 1896, by Fritz Hoffman-La Roche, headquartered in Basel, Switzerland, is the fifth-largest pharmaceutical company in the world. Novartis International AG, the largest pharmaceutical company in the world, is another giant Swiss company (that also has Vanguard Group as a major shareholder) owns a third of Roche's shares. In 2013 Roche's revenue was CHF 46.780 billion and the company had 85,080 employees.

In 1999, the company pleaded guilty to participation in a worldwide conspiracy to raise and fix prices for vitamins sold in the US and globally. Roche paid $500 million in criminal fines to the US Government. In 1973, Stanley Adams, Roche's World Product Manager in Basel, contacted the EEC with evidence that Roche had been breaking antitrust laws, engaging in price fixing and market sharing for vitamins with its competitors. Roche was fined accordingly, but a bungle on the part of the EEC allowed the company to discover that it was Adams who had blown the whistle. He was subsequently arrested for unauthorised disclosure, an offence under Swiss law, and then imprisoned.

Novartis International AG: As previously mentioned in chapter twelve, Novartis was founded in 1996 as the result of a merger of Ciba-Geigy and Sandoz. Novartis International

AG is now the world's largest pharmaceutical company. In 2013 the company had revenues of $57.9 billion and employees 135,696. The company's business is divided into six operating divisions: Pharmaceuticals, Alcon (eye care), Vaccines and Diagnostics, Sandoz (generics), Consumer (divided into two divisions: Over-the-Counter and Animal Health), and Corporate etc.

International Federation of Pharmaceutical Manufacturers & Associations (IFPMA)

All of these corrupt pharmaceutical companies and their regional associations are members of the IFPMA, which is basically the global pharmaceutical equivalent of the Global Lighting Association cartel and mafia.

The IFPMA was founded in 1968, with its secretariat based in Geneva, Switzerland. It represents the entire multi-trillion dollar global pharmaceutical industry, including the biotechnology and vaccine sectors.

Like the Global Lighting Association, it manipulates, lobbies and bribes politicians, senior government officials, government departments, universities, medical associations and health professionals all around the world, EU and UN to implement its nefarious policies or use its often questionable products.

It has close official relations with the World Health Organisation (WHO), also based in Geneva, Switzerland, and indirectly controls much of this UN agency's international health policies. A full list of IFPMA members may be seen on the official IFPMA website: http://www.ifpma.org/about-ifpma/members/associations.html

Cigarette smoking history

If one looks at the corrupt history of tobacco smoking from its earliest beginnings up to the present day, it is identical to the pharmaceutical and lighting industry in every respect, especially relating to the harmful health effects of its products.

The history of smoking can be dated to as early as about 2000 BC in shamanistic rituals in Babylon, India and China. Cannabis smoking in the Middle East and opium smoking in China was common long before the arrival of tobacco.

Tobacco is a plant of the nightshade family (Solanaceae). There are about 70 species, indigenous to North and South America, Australia, South West Africa and the South Pacific. The chief commercial crops grown around the world are *N. tabacum* and *N. rustica.* Tobacco contains the alkaloid nicotine, a stimulant. A Frenchman, named Jean Nicot (from whose name the word "nicotine" is derived) introduced tobacco to France in 1560, and it was around this time that tobacco was introduced to the rest of Europe and England.

Tobacco cultivation sites in Mexico are thought to date back to 1400-1000 BC and it had been smoked by indigenous peoples of the Americas since that time. Following the arrival of the Europeans, tobacco became increasingly popular as a trade item.

Pope Urban VII: Within about 50-years of it being introduced to Europe, the practice of smoking tobacco had increased enormously. So much so, even though Pope Urban VII's papacy began on September 15, 1590, and ended with his death from malaria just two weeks later – he banned all tobacco "in the porch-way of or inside a church, whether it be by chewing it, smoking it with a pipe or sniffing it in powdered form through the nose." – The penalty for breaking his edict? – Excommunication.

King James I: Shortly afterwards, in 1604, King James I of England wrote a treatise *'A Counterblaste to Tobacco'* against its use. *"What honour or policie can move us to imitate*

the barbarous and beastly maners of the wilde, godlesse, and slavish Indians, especially in so vile and stinking a custom?" He later referred to smoking as; "A custome loathsome to the eye, hatefull to the Nose, harmefull to the braine, dangerous to the Lungs, and in the black and stinking fume thereof, nearest resembling the horrible Stigian smoke of the pit that is bottomless." Although he hated it, he didn't ban tobacco altogether, but did increase the tariffs and excise taxes on the weed by upwards of 4,000%.

France: While this was taking place in England, in France smokers found that they would have to buy their tobacco from an apothecary only with a doctor's prescription! Luckily for smokers, however, this restriction didn't last long as in 1637 King Louis XIII, a snuff man himself, understandably repealed all these restrictive tobacco laws.

America: In America, in 1612, just six years after the settlement of Jamestown, John Rolfe was credited as the first settler to successfully raise tobacco as a cash crop. Soon the demand grew as tobacco quickly came to be referred to as the "golden weed" and its exploitation was responsible for reviving the Virginia joint stock company from its failed gold expeditions.

Like tea, coffee and opium, tobacco was just one of many intoxicants that were originally used as a form of medicine. From the founding of the economy of the southern United States until it was replaced by cotton, tobacco production was the main agricultural product.

Following the American civil war, a change in demand and a change in labour force allowed inventor James Bonsack to create a machine in 1881 that automated cigarette production producing over 200 cigarettes a minute and 70,000 cigarettes in a 10-hour day. James Buchanan "Buck" Duke rented two of the machines and he went on to become a massive commercial success, and in 1889 he became president of the new American Tobacco Company consortium.

Within two decades of its founding, the American Tobacco Company absorbed about 250 companies and produced 80% of the cigarettes, plug tobacco, smoking tobacco, and snuff produced in the United States. The American Tobacco Company grew so quickly and dominated the market as a monopoly to such an extent that following the passing of the US Sherman Antitrust Act in 1890, in 1907 the American Tobacco Company was indicted in violation of it. As the result, the US Supreme Court ordered the company to dissolve in 1911 on the same day that it ordered the Standard Oil Trust to dissolve also.

Four firms were created from the breakup of the giant American Tobacco Company's assets: American Tobacco Company, R.J. Reynolds, Liggett & Myers and Lorillard. Then the monopoly became an oligopoly. Today, in 2014, all these companies are now controlled by the British financial front groups, BlackRock and Vanguard Group. Liggett Group has since been taken over by Vector Group, also controlled by Vanguard.

(BAT): http://www.4-traders.com/BRITISH-AMERICAN-TOBACCO-4001163/company/

(Lorillard):http://investors.morningstar.com/ownership/shareholders-overview.html?t=LO

(Vector): http://investors.morningstar.com/ownership/shareholders-major.html?t-VGR

Around the same time as the antitrust action in 1911, the company's share in British American Tobacco (BAT) was sold. In 1994 BAT acquired its former parent, American Tobacco Company (since reorganised after the antitrust proceedings in the early 1900s).

This then brought the successful Lucky Strike and Pall Mall brands into BAT's portfolio as part of BAT's American arm, Brown & Williamson (B&W). B & W later merged with R.J. Reynolds Tobacco Company in 2004 – **subsequently all taken over by BlackRock and Vanguard as at 2014, shown in the links above.**

This massive increase in production allowed tremendous growth and change in the tobacco industry, until the campaigns against it later in the 20th century based on scientific evidence proved it to be a serious health hazard. Today, many of the world's biggest multinational banks and corporations were birthed from their trade in drugs, slaves and tobacco.

Early studies that proved cigarette smoking caused cancer which the medical profession rejected

Prior to World War I: Lung cancer was a rare disease that most physicians never saw in their career. In 1912, American Dr Isaac Adler was the first to strongly suggest that lung cancer was related to smoking. However, with the post-WWI rise in cigarette smoking and advertising, his suggestions were treated with scorn by the widespread medical community.

Germany 1929: With the enormous rise in numbers of people smoking, nascent investigations into the link between smoking and lung cancer, particularly in Germany were undertaken. In 1929, Fritz Lickint, a German physician of Dresden, published a formal paper with statistical evidence of a lung cancer-tobacco link, based on a study that showed lung cancer sufferers were likely to be smokers. Lickint also argued that tobacco use explained the fact that lung cancer struck men four or five times more often than women since women smoked much less. He then went on a crusade against smoking, and anti-tobacco activism and sentiment greatly increased in Germany from that time.

Germany 1912-1935: In Germany, groups often associated with anti-liquor groups, first published strong advocacy against the consumption of tobacco in the journal *Der Tabakgegner* 'The Tobacco Opponent' between 1912 and 1932. Another similar German journal, *Deutsche Tabakgegner* 'German Tobacco Opponents' was published from 1919-1935.

Nazi Germany 1933-1945: After Hitler rose to power during the Great Depression he condemned his earlier smoking habit and later viewed smoking as decadent. After the Nazis in Germany took control, Werner Huttig of the Nazi Party's *Rassenpolitisches Amt* 'Office of Racial Politics' claimed that a smoking mother's breast milk contained nicotine, a claim modern science has since verified.

Anti-tobacco research flourished in the Third Reich. Animal experimental work demonstrated that the tar extracted from cigarette smoke could cause cancer and physical chemists distilled tobacco tars to identify the carcinogenic components. The editor of Germany's *Monatsschrift für Krebsbekampfung* 'Monthly Anti-Cancer Journal' organised animal experiments to test whether smoking causes lung cancer. Rats were put into a glass chamber and cigarette smoke was pumped in from the top. German Nazi scientists established tumour registries, which included the first broad registries of cancer incidence, and not just mortality. They also performed extensive work in occupational carcinogenesis. Physicians documented the health hazards of asbestos, and in 1943 Germany became the first nation to recognise lung cancer and mesothelioma caused by asbestos inhalation as compensable occupational illnesses.

Nazi Germany also pioneered what is now called experimental epidemiology. Two striking papers, a 1939 article by Franz H. Müller, a physician at Cologne's Bürgerhospital, and a

1943 paper by Eberhard Schairer and Erich Schoniger of Jena, presented the most convincing demonstrations up to that time that cigarettes were a major cause of lung cancer. Franz H. Müller analysed the smoking habits of 86 male lung cancer patients and compared them with the habits of age-standardized 'controls' not suffering from lung cancer. His findings were clear-cut and striking. The lung cancer patients were much more likely to be heavy smokers and much less likely to be non-smokers. 16% of the healthy group were non-smokers, compared with only 3.5% for the lung cancer group. The 86 lung cancer patients smoked a total of 2,900 grams of tobacco per day, while the 86 healthy men smoked only 1,250 grams.

Müller concluded that tobacco was not just "an important cause" of lung cancer, but also that "the extraordinary rise in tobacco use" was "the single-most important cause of the rising incidence of lung cancer" in recent decades.

Müller's work was taken one step further by Eberhard Schairer and Erich Schoniger, physicians working at Jena's Institute for Tobacco Hazards Research. They drew attention to the fact that a heavy smoker could inhale as much as four kilograms of tar over a lifetime, a frightening figure given Angel H. Roffo's demonstration that animals painted with tobacco tars develop high rates of cancer. Müller, Schairer and Schoniger sent questionnaires to the relatives of 195 lung cancer victims inquiring into the smoking habits of the deceased. The results were clear. Among the 109 lung cancer cases for which usable data was obtained, only 3 were non-smokers. This study was published in 1943 by the German Institute for Tobacco Hazards Research. A 1994 re-evaluation of their research showed that the probability that they were wrong was less than one in ten million. Today, no mention is ever made of the fact that funding for Astel's Institute, and therefore for Schairer and Schoniger's study, came directly from a gift of 100,000 Reichmarks from the Führer, himself an ardent anti-smoking activist.

Biology was another field that thrived in Nazi Germany. Ute Deichmann in her book, *Biologists Under Hitler* (Harvard University Press 1996) shows also that the majority of biologists in the thirties and early forties joined the Nazi Party.

The complicity of German physicians in the Nazis' crimes against humanity is a well-established historical fact. Explaining that fact is much more difficult as many of these individuals were highly educated professionals. Why were German doctors such avid fans of fascism? Why did nearly half of all German physicians join the Nazi Party?

It took a lot of medical enthusiasm to forcibly sterilize 350,000 Germans, to euthanize 70,000 people with physical or mental disabilities (from January 1940 to August 1941) and many more were murdered in the informal euthanasia program launched after this time. There is nothing inherently evil about physicians working and cooperating with their government. But there is in serving anti-God, fascist, Nazi, spiritual values.

The Nazi FASCIST state was supposed to be a "hygienic state." Hitler was celebrated as the "great doctor" of all German Society. The seductive power of National Socialism for most physicians lay in the promise to "cleanse" German society of its corrupting elements, not just the mentally retarded and infirm, homosexuals, the obese, communists and Jews, but also metallic lead, mercury, alcohol and tobacco.

Hitler once even attributed the rise and success of German fascism to his quitting smoking.

Ref. *Nazi Medicine and Public Health Policy* by Robert N. Proctor.

http://archive.adl.org/braun/dim_14_1_nazi_med.html

It might seem hard to believe for us to today, but there were strict ethical standards in Nazi Germany that governed medical research and medicine in the Third Reich. Nordic supremacy, cleanliness, punctuality, orderliness, unquestioned obedience to authority, work ethics, physical exercise, environmental health, preventative medicine, cost efficiency, natural food and lifestyle were all cherished ideals.

Key fascist police state Nazi programs included the centralization of public health services, eliminating the medical confidentiality of patients and forcing doctors and others to disclose the identity of people with serious diseases or deficiencies that might "pollute" or become a "drain" on the rest of society.

There were Nazi programs to clean up water supplies, eliminate pollution, and remove lead, asbestos and mercury from consumer products. Doctors were urged to counsel patients against tobacco and alcohol use, and ensure the best medical care for every pregnant woman. All private natural health healers were banned.

Nazi doctors were not madman. In fact, they perfectly understood and acted against the damaging effects of tobacco long before Britain, America and the rest of the world combined. But they were still demonic, National Socialists, and included these measures as part of their wider socialist goals of racial hygiene and eugenics.

But the fact remains, while the Nazis were well aware of the serious health hazards of smoking, disgracefully, there were just a relative handful of doctors or scientists in the West identifying the health hazards of cigarette smoking and none of them were being respected at all.

Britain 1948-1950: In Britain, in 1948, the British physiologist Richard Doll published the first major study that proved that smoking could cause serious health damage. Two years later, on 30 September 1950, some of Dr Doll and Professor Bradford Hill's research was published in the British Medical Journal that showed a close link between smoking and lung cancer.

Four years later, in 1954, the British Doctors Study confirmed his suggestions, and this study lasted till 2001, with the results published every ten years and final results published in 2004 by Doll and Richard Peto.

Doctors, American Medical Association hawked cigarettes as healthy for consumers

The American author, Mike Adams, editor of NaturalNews http://www.naturalnews.com/ on July 25 2007, published an outstanding work on the subject titled, *Doctors, American Medical Association hawked cigarettes as healthy for consumers.*

http://www.naturalnews.com/z021949_Big_Tobacco_the_AMA.html

The following are some extracts from Mike's excellent, succinct article in which he summarizes the collusion between big business and the medical profession perfectly. He writes:

"Despite its stated mission, "To promote the art and science of medicine and the betterment of public health," the American Medical Association (AMA) has taken many missteps in protecting the health of the American people. One of the most striking examples is the AMA's long-term relationship with the tobacco industry.

Both the AMA and individual doctors sided with big tobacco for decades after the deleterious effects of smoking were proven. Medical historians have tracked this relationship in great detail, examining internal documents from tobacco companies and

their legal counsel and public relations advisers. The overarching theme of big tobacco's efforts was to keep alive the appearance of a "debate" or "controversy" of the health effects of cigarette smoking...

In 1938, Dr Raymond Pearl of John Hopkins University reported that smokers do not live as long as non-smokers. The tobacco industry dismissed these early findings as anecdotal – but at the same time recruited doctors to endorse cigarettes.

The Journal of the American Medical Association (JAMA) published its first cigarette advertisement in 1933, stating that it had done so only "after careful consideration of the extent to which cigarettes were used by physicians in practice." These advertisements continued for 20 years. The same year, Chesterfield began running ads in the New York State Journal of Medicine, with the claim that its cigarettes were "Just as pure as the water you drink … and practically untouched by human hands."

In medical journals and in the popular media, one of the most famous cigarette advertising slogans was associated with the Camel brand: "More doctors smoke Camels than any other cigarette." The campaign began in 1946 and ran for eight years in magazines and on the radio. The ads included this message:

"Family physicians, surgeons, diagnosticians, nose and throat specialists, doctors in every branch of medicine… a total of 113,597 doctors… were asked the question: 'what cigarette do you smoke?' And more of them named Camel as their smoke than any other cigarette! Three independent research groups found this to be a fact. You see, doctors too smoke for pleasure. That full Camel flavour is just as appealing to a doctor's taste as to yours… that marvellous Camel mildness means just as much to his throat as to yours.""

Author's note: Here is one of the first early mainstream U.S. television ads by doctors titled, *'More doctors smoke Camels than any other cigarette':*
http://www.youtube.com/watch?v=gCMzjJjuxQI

"At the same time that JAMA ran cigarette ads, it published in 1950 the first major study to causally link smoking to lung cancer. Morton Levin, then director of Cancer Control for the New York State Department of Health, surveyed patients in Buffalo, N.Y., from 1938 to 1950 and found that smokers were twice as likely to develop lung cancer as non-smokers.

Cigarette producers may have hoped that the public would remain unaware of studies published in medical journals. However, the dangers of smoking became widely known in 1952 when *Reader's Digest* published *'Cancer by the Carton'* detailing the dangers of cigarettes. Within a year sales fell for the first time in more than two decades.

The tobacco industry responded swiftly, engaging the medical community in its efforts. The Tobacco Industry Research Committee (TIRC) was formed by U.S. tobacco companies in 1954. By sponsoring "independent" scientific research, the TIRC attempted to keep alive a debate about whether or not cigarettes were harmful. The industry announced the formation of the TIRC in an advertisement that appeared in the New York Times and 447 other newspapers reaching more than 43 million Americans. The advertisement, titled "A Frank Statement to Cigarette Smokers," read:

"*RECENT REPORTS on experiments with mice have given wide publicity to a theory that cigarette smoking is in some way linked with lung cancer in human beings. Although conducted by doctors of professional standing, these experiments are not regarded as conclusive in the field of cancer research. However, we do not believe that any serious*

medical research, even though its results are inconclusive should be disregarded or lightly dismissed.

At the same time, we feel it is in the public interest to call attention to the fact that eminent doctors and research scientists have publicly questioned the claimed significance of these experiments. Distinguished authorities point out:

1. That medical research in recent years indicates many possible causes of lung cancer.
2. That there is no agreement among the authorities regarding what the cause is.
3. That there is no proof that cigarette smoking is one of the causes.
4. That statistics purporting to link cigarette smoking with the disease could apply with equal force to any one of many other aspects of modern life. Indeed the validity of the statistics themselves is questioned by numerous scientists.

We accept an interest in people's health as a basic responsibility, paramount to every other consideration in our business. We believe the products we make are not injurious to health.

We always have and always will cooperate closely with those whose task it is to safeguard the public health. For more than 300 years tobacco has given solace, relaxation, and enjoyment to mankind. At one time or another during those years critics have held it responsible for practically every disease of the human body. One by one these charges have been abandoned for lack of evidence.

Regardless of the record of the past, the fact that cigarette smoking today should even be suspected as a cause of a serious disease is a matter of deep concern to us. Many people have asked us what we are doing to meet the public's concern aroused by the recent reports. Here is the answer:

1. We are pledging aid and assistance to the research effort into all phases of tobacco use and health. This joint financial aid will of course be in addition to what is already being contributed by individual companies.
2. For this purpose we are establishing a joint industry group consisting initially of the undersigned. This group will be known as TOBACCO INDUSTRY RESEARCH COMMITTEE.
3. In charge of the research activities of the Committee will be a scientist of unimpeachable integrity and national repute. In addition there will be an Advisory Board of scientists disinterested in the cigarette industry. A group of distinguished men from medicine, science, and education will be invited to serve on this board. These scientists will advise the Committee on its research activities.

This statement is being issued because we believe the people are entitled to know where we stand on this matter and what we intend to do about it."

"The statement – signed by presidents of major tobacco interests including Phillip Morris, Brown & Williamson, and R.J. Reynolds – was designed to launch the "controversy" which I mentioned earlier. In fact, there was no controversy. The research results were clear: smoking had been proven harmful – not just to mice, but to people who had for years been advised that smoking offered health benefits.

The TIRC promised to convene "a group of distinguished men from medicine, science, and education" and it did so. Early members of the TIRC's Scientific Advisory Board (SAB) included: McKeen Cattell, PhD, MD, professor of pharmacology from Cornell University Medical College; Julius H. Comroe, Jr., MD, director of the University of California Medical Center's cardiovascular research institute and chairman of University of Pennsylvania

Graduate School of Medicine; and Edwin B. Wilson, PhD, LLD, professor of vital statistics, Harvard University…

After three decades, the AMA finally admits smoking is harmful: After the 1964 Surgeon General's landmark report on the dangers of cigarettes, the CTR stepped up its work, providing materials to defend the tobacco industry against litigation. The same year – three decades after medical research demonstrated the dangers of cigarettes – the American Medical Association finally issued a statement on smoking, calling it "a serious health hazard."

It was not until 1998 that the CTR was shut down – and only after the tobacco industry lost a major court case brought forward by states across the country…

The medical conspiracy continues today: It is my belief that just as private industry and the medical community conspired to deceive the public on tobacco (and thereby profit from the public's ignorance of tobacco's extreme health hazard), the same story is repeating itself today in the cancer industry, the sunscreen industry, and the pharmaceutical industry. In each case, so-called "authoritative" doctors insist that whatever they're pushing is safe for human consumption, and that the public should buy their products without any concern about safety.

And yet these industries are much like the tobacco industry in the fact that **they primarily seek profits** not health. Medicine today is in the business of making money, and that goal is achieved by selling chemical products to consumers regardless of their safety or efficacy. Big Medicine is the modern version of Big Tobacco, and over the last several decades, the American Medical Association has proudly supported both cigarettes and pharmaceuticals.

In my opinion, **the AMA is indirectly responsible for the deaths of millions of Americans** – not just from pushing cigarettes but also for continuing to push dangerous pharmaceuticals while discrediting nearly everything in natural medicine or alternative medicine.

The AMA is a truly evil organization, in my opinion, that I believe has directly and knowingly contributed to the suffering and death of Americans for more than 75 years. Read my story, *what the AMA hopes you never learn about its true history* to learn more. In a just society, AMA leaders would be arrested and tried for their crimes against humanity, just as top FDA officials should be…

In studying the history of product commercialization by medical groups, what we constantly find is a series of cons perpetrated against consumers, masterminded by profit-seeking medical groups that conspire with corporations to maximize profits at the expense of public health. Nothing has changed today, either. The AMA isn't pushing cigarettes anymore, but it's still pushing deadly pharmaceuticals that will one day be regarded as just as senseless as smoking…

Medical science is slow to change, and slow to give up its closely-guarded (false) beliefs. In time, however, virtually everything now supported by the medical industry (the FDA, AMA, ACS, etc.) will be regarded as insanely harmful to human health.

One day, future scientists will look back on medicine today and wonder just how such an industry of evil and greed could have gained so much power and authority. The answer is found in "groupthink" and the strange knack for humans to defer to anyone in an apparent position of authority, regardless of whether such authority is warranted."

Yet after all this, you would think that the cigarette manufacturing companies would be going out of business or closed down – NOT SO!

Here are some interesting smoking facts:

1. Even still today, cigarettes are the single-most traded item on the planet, with approximately one trillion being sold each year, producing global revenue for cigarette companies of about $400 billion.
2. Anglo/American cigarette manufacturers now make more money selling cigarettes to other countries rather than their own.
3. Cigarettes contain more than 4000 ingredients, which, when burned, can also produce over 200 compound chemicals. Cigarettes contain arsenic, formaldehyde, lead, hydrogen cyanide, nitrogen oxide, carbon monoxide, ammonia and about 43 other known carcinogens.
4. In the early 1950s, the Kent brand of cigarettes used crocidolite asbestos as part of the filter, a known active carcinogen.
5. Urea, a chemical compound that is a major component in urine, is used to add "flavour" to cigarettes.
6. Scientists currently claim the average smoker globally will lose 14 years of their life due to smoking.
7. Nicotine reaches the brain within 10 seconds after smoke is inhaled. Nicotine has been found in every part of the body and in breast milk.
8. Sugar approximates to roughly 20% of a cigarette.
9. Benzpyrene, long used as a combustion product of burning tobacco in cigarettes, in all independent laboratory animal experiments, it has been shown to possess serious carcinogenic properties.
10. According to the US Centers for Disease Control and Prevention (CDC) http://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/tobacco_related_mortality/ cigarette smoking still causes about one of every five deaths in the United States each year. It is estimated to cause more than 480,000 deaths annually (including deaths from second-hand smoke). Men who smoke increase their risk of dying from bronchitis and emphysema by 12 times, and from cancer of the trachea, lung and bronchus by more than 12 times. During 2010-2014, almost 282,000 women (56,359 each year) will die from lung cancer. Smoking increases the risk of dying from coronary heart disease among middle-aged women by almost five times.

An Epidemic of False Claims

So all in all, the moral of the story, it seems, is that it doesn't matter whether a company is selling cigarettes, food, pills or light bulbs, regardless of the adverse health effects, the inherent greed is the same.

And if all this is not enough – even the *Scientific American* magazine (normally a conservative publication that protects the interests of scientists) published a revealing article on May 17, 2011, by John P.A. Ioannidis titled, *An Epidemic of False Claims,* and stated:

"**False positives and exaggerated results in peer-reviewed scientific studies have reached epidemic proportions in recent years. The problem is rampant in economics, the social sciences and even the natural sciences, but it is particularly egregious in biomedicine. Many studies that claim some drug or treatment is beneficial have turned out not to be true…**

The problem begins with the public's rising expectations of science. Being human, scientists are tempted to show that they know more than they do. The number of investigators – and the number of experiments, observations and analyses they produce – has also increased exponentially in many fields, but adequate safeguards against bias are lacking. Research is fragmented, competition is fierce and emphasis is often given to single studies instead of the big picture.

Much research is conducted for reasons other than the pursuit of truth. Conflicts of interest abound, and they influence outcomes. In health care, research is often performed at the behest of companies that have a large financial stake in the results. Even for academics, success often hinges on publishing positive findings. The oligopoly of high-impact journals also has a distorting effect on funding, academic careers and market shares. Industry tailors research agendas to suit its needs, which also shapes academic priorities, journal revenue and even public funding.

The crisis should not shake confidence in the scientific method. The ability to prove something false continues to be a hallmark of science. But scientists need to improve the way they do their research and how they disseminate evidence…"

So the real truth is, unfortunately, it is probably going to be very difficult to persuade the majority of the world's population to reject LEDs until it is too late – NO THANKS TO THE MAJORITY OF DOCTORS AND SCIENTISTS!

CHAPTER TWENTY-FOUR

NEW WORLD ORDER
LED SURVEILLANCE POLICE STATE

Defence Advanced Research Projects Agency (DARPA)

DARPA, headquartered in Arlington, Virginia, is an agency of the United States Department of Defense responsible for the development of new technologies for use by the military. The agency originally began as the Advanced Research Projects Agency (ARPA) established in 1958 by President Eisenhower to develop and advance military technology in competition with the USSR, following the Soviet's launching of Sputnik I in 1957.

While today DARPA employs only about 250 top people directly, with a budget of $2.8 billion, it has huge power within the US military, being the chief coordinating agency for military hi-tech programs. This includes such programs as the development of high energy laser weapons, and particularly technological SURVEILANCE systems like the current *Satellite Remote Listening System* it is currently developing, which can literally eavesdrop on any target area of the world by satellite, and combined with satellite cameras, listen to and visually track every person on earth.

DARPA works closely with its sister organizations, the Advanced Research Projects Agency-Energy (ARPA-E) (within the Department of Energy that is forcing LED technology on Americans), Homeland Security Advanced Research Projects Agency (HSARPA) (Department of Homeland Security), and Intelligence Advanced Research Projects Activity (IARPA) (Director of National Intelligence).

DARPA also works with other leading US military agencies such as the Central Intelligence Agency (CIA) and National Security Agency (NSA), which all are indirectly controlled by Britain.

The CIA was created out of the Office of Strategic Services (OSS) formed during WW2 to coordinate secret intelligence activities to assist Britain's defense against Germany and Japan. William J. Donovan, who was the head of the OSS during the war, today is known as the "Father of American Intelligence." Donovan was also instrumental in founding the CIA out of the OSS on September 18, 1947, and took all of his instructions in running both agencies not from the US president, but from Sir William Stephenson, the head of British Intelligence in the US during the war. Even today, to signify British Freemasonry's control of the CIA, the badge of the Agency is dominated by the United Grand Lodge of England's 16-point star of LUCIFER – which is emblazoned on the Grand Temple ceiling in Freemason's Hall, Great Queen Street, London. Today the CIA has a staff of 20,000 to 30,000 and an annual classified budget of about $15 billion (plus its Black Budget of about the same amount generated from its vast drug dealing operations used secretly to bribe its corrupt political puppets all around the world). *Facebook* is a secret program run by the CIA.

The NSA, headquartered in Fort Meade, Maryland, is the biggest spy agency in the world, with about 40,000 – 50,000 employees and a classified budget estimated to be about $10

billion to $15 billion. Following the end of WW2, it was formed out of the Armed Forces Security Agency on November 4, 1952. Like the CIA, it too, is indirectly controlled by Britain through a [formerly kept secret] treaty called the UKUSA Agreement. The agreement originated from a ten-page British – US communications intelligence agreement known as the 1943 BRUSA agreement, that secretly linked the intelligence interception networks of the UK Government Communications Headquarters (GCHQ) and the US National Security Agency (NSA) at the beginning of the Cold War, signed on 5 March 1946. The UKUSA Agreement gave Britain control over not only the United States intelligence at the NSA, but virtually all global intelligence operated through its *Echelon* "Five Eyes" spy network, comprising the UK, US, Canada, Australia and New Zealand. Now the agreement extends to all UKUSA –collaborating Commonwealth countries, and other third party countries such as Norway, Denmark and Germany. Indirectly, then, DARPA, through the CIA and NSA and US Department of Defense, is simply a "proxy" of global British Intelligence.

The CIA's Luciferian, anti-God, hypocritical motto is: "*And you shall know the truth and the truth shall make you free,"* a perversion of John 8:31-32, where Jesus said to the Jews, "***If ye continue in my word,*** *then are ye my disciples indeed; And ye shall know the truth, and the truth shall make you free."* Of course, this doesn't include all those who do not continue in Christ's words of truth and explains why the CIA has grown to hypocritically become one of the biggest secret drug-dealing, corrupt, police state intelligence agencies in the world.

So what has DARPA been doing?

DARPA: Information Awareness Office

The Information Awareness Office (IAO) was established by DARPA on January 2002 to bring several DARPA surveillance technology projects together to supposedly "monitor terrorists" and other potential "emerging" threats to US national security. Among these projects now is the **Human Identification at a Distance (Human ID)** project that has developed automated biometric identification technologies to detect, recognize and identify humans at great distance for force protection, crime prevention, and Homeland Security defense purposes. Another is the **Evidence Extraction and Link Discovery (EELD)** project, which focuses on the development of technologies and tools for automated discovery, extraction and linking of sparse evidence contained in large amounts of classified and unclassified data sources (such as phone call records from the NSA call database, internet histories, bank records, financial transactions, communications, travel etc.) from those individuals who are considered an "enemy of the state." Yet another is the **Scalable Social Network Analysis (SSNA)** system which is aimed at developing surveillance techniques based on social network analysis for modelling the key characteristics of terrorist groups and non-conformist groups to discriminate these groups from other societal groups that are considered benign.

DARPA: Combat Zones That See (CTS) and LEDs

Another project of DARPA's is ***Combat Zones That See (CTS)*** whose goal is to "track everything that moves" in not only the US, but every major city in the world by linking up a massive network of LED lighting and surveillance cameras to a centralised global **"CLOUD"** computer system. Artificial software will then identify and track all movement of every single person, vehicle, animal, throughout every city on earth.

This system was first intended for use in combat zones to deter enemy attacks on American troops and to track enemy combatants, but now it is being developed to track every single

person on earth. This total all-encompassing New World Order fascist police state surveillance system is being set up with Smart LED lighting systems in US cities right now!

Smart Lights: New LEDS Allow NSA to spy on your every movement

In early July 2014, a stunning, short YouTube clip was posted on the internet explaining what is happening titled, *Smart Lights: New LEDS Allow NSA To spy On Your Every Movement.* Although frightening, it is well worth watching to appreciate what is so profoundly and quickly happening: http://www.youtube.com/embed/6kSEnSVFD5o

CBS News ran an article about it on June 30, 2014, by Bill Whitaker titled, *These LED smart lights are tracking your moves*. http://www.cbsnews.com/news/technology-in-led-smart-lights-raises-privacy-concerns/ Bill writes:

"While more people and places are switching to energy-saving LED light bulbs, a California company has found a way to turn them into smart networks that can collect and feed data. However, the new technological opportunities are also raising privacy concerns, reports CBS News' Bill Whitaker. For example, should you find yourself in terminal "B" at Newark airport, look up. Those aren't just new lights. They're smart lights – a sophisticated array of LED fixtures with built-in sensors and cameras connected over a wireless network. They monitor security and the flow of foot traffic.

… Saving money isn't the only reason the bulbs are in the spotlight. "There's a motion sensor in each individual light," he said. Across the globe, cities are phasing out old, energy-wasting incandescent and sodium bulbs and replacing them with LEDs, which can act as a power hub that can be tailored for high-tech add-ons. That's the "smart" part. They're also 90 percent more efficient, longer lasting and burning much brighter. There are about 4 billion outside lights in the world today. Imagine all of those lights connected to one global network. A building in Silicone Valley is one of the few places in the country where a smart light network has been installed. They're used primarily for security. The 40 lampposts in the parking lot holds 83 LED lights, and they're connected to seven cameras in a seamless grid that tracks and records people's moves.

"We do use the license plate recognition, and we can also detect people," said Kevin Kirk, chief engineer for the Shorenstein Company, which owns the building. The company plans to install smart lights at its properties across the country. **"Everything goes up into the cloud, so we can access everything from anywhere. The future is limitless for this technology,"** Kirk said."

More and more evidence is pointing to the fact that Microsoft is preparing a **"CLOUD-BASED"** Windows operating system with ***Windows 9*** for 2015, or shortly thereafter, to link with a global surveillance and intelligence system network run by the CIA, NSA and other intelligence organizations around the world. This means, that instead of using a personal computer at home every time to run a native application, store data or perform any other computing task, it will have to be stored on a global network of servers controlled by a New World Order, World Government, police-state. Plus, you will probably have to pay a monthly or annual fee to Microsoft for the privilege! In chapter six, *The Spiritual Dimension: War between Christ & Lucifer*, the author referred to the biography of Lucifer in Isaiah 14, linked with "Luciferian LEDs"**. *"For thou hast said in thine heart, I will ascend into heaven … I will ascend above the heights of the clouds; I will be like the most High."* (Isaiah 14:13-14).**

LED technology is racing ahead of most people's ability to truly appreciate what is happening, and clearly it is not only our eyes that we have to worry about as it expands.

Las Vegas installs Smart LED street lights with Voice Recording features

On November 12 2013, *LEDinside* published an article titled, *Las Vegas Installs Smart LED Street Lights with Voice Recording Features.*

http://www.ledinside.com/news/2013/11/las_vegas_installs_smart_led_street_lights_with_voice_recording_features

"Intelligent LED street lights that are capable of eavesdropping pedestrian conversation from U.S. based company Intellistreets have been installed in Vegas City Hall, according to a Daily Mail report. The new lights are largely funded with government aid and come with video and audio recording capacities. This has raised concerns from local residents that the "surveillance lights" could invade personal space and privacy…"

Philips creates shopping assistant with LEDs and Smart Phone

In February 2014, in Europe, Philips introduced a system that connects in-store LED lights with consumers' smart phones. Using a downloadable app, people will be able to locate items on their shopping lists or get coupons as they pass products on the aisles.

http://spectrum.ieee.org/tech-talk/computing/networks/philips-creates-store-shopping-assistant-with-leds-and-smart-phone

"Retailers can send targeted information such as recipes and coupons to the consumers based on their precise location within stores, while gaining benefits of energy-efficient LED lighting, says Philips... The system uses Visual Light Communications (VLC) to talk with consumers' smartphones. Unlike the wireless protocols Wi-Fi, Bluetooth, and Zigbee, which use radio waves to send information. VLC relies on store lights to transmit data to the camera on a smart phone in fast pulses. The lights blink at frequencies that are undetectable by people, according to LEDs Magazine."

Mind Control Scientists Using Light To Alter The Brain

On June 30, 2014, Nicholas West of *Activist Post* published an amazing article titled, *Mind Control Scientists Using Light To Alter the Brain.*

http://www.activistpost.com/2014/06/mind-control-scientists-using-light-to.html

Nicholas writes;

"The race to decode the brain continues, and quickens by the day. The mind control of the future foregoes all pretense at directly altering perception through media and politics, or even mind-altering drugs and environmental toxins. The mind control of the future goes straight into direct programming and rewiring of the human brain.

These new mind control techniques are being introduced in gadgets that create a brain-computer interface, magnetic manipulation via "neural dust" high-powered lasers, and even the direct uploading of the contents of our brain. One must then consider the subsequent hacking of our minds as our brains enter the digital realm.

Until this point, much of the research has been focussed on different forms of *physical* implants – no matter how small – to target the memory centers of the brain. Researchers at MIT **(funded by DARPA)** are now unveiling a next-generation remote control system which uses *light* from outside the skull to affect the protein responsible for neuron activity in the brain. The news release and video, posted in full below, are titled matter-of-factly: "Non –

Invasive Brain Control." Just in case this alone doesn't sound ominous enough, researchers have labelled the control mechanism "Jaws."

… **Optogenetics**, a technology that allows scientists to control brain activity by shining light on neurons, relies on light sensitive proteins that can suppress or stimulate electrical signals within cells. This technique requires a light source to be implanted in the brain, where it can reach the cells to be controlled. MIT engineers have now developed the first light-sensitive molecule that enables neurons to be silenced noninvasively, using a light source outside the skull. This makes it possible to do long-term studies without an implanted light source. The protein, known as Jaws… Using this opsin, the researchers were able to shut down neuronal activity in the mouse brain with a light source outside the animal's head. The suppression occurred as deep as 3 millimeters in the brain…

Restoring Vision: Working with researchers at the Friedrich Miescher Institute for Biomedical Research in Switzerland, the MIT team also tested Jaws ability to restore the light sensitivity of retinal cells called cones. In people with a disease called retinitis pigmentosa, cones slowly atrophy, eventually causing blindness. Friedrich Miescher Institute scientists Boland Roska and Volker Busskamp have previously shown that some vision can be restored in mice by engineering those cone cells to express light sensitive proteins…

This type of noninvasive approach to optogenetics could also represent a step toward developing optogenetic treatments for diseases such as epilepsy, which could be controlled by shutting off misfiring neurons that cause seizures, Boyden says. "Since these molecules come from species other than humans, many studies must be done to evaluate their safety and efficacy in the context of treatment, he says."

The light sources being used in these optogenetic applications are typically blue and green Laser Diodes (LDs).

Conclusion

So the moral of the story is, if we all don't wake up soon – apart from ending up mind-controlled by blue Laser Diodes (LDs), with the tyrannical New World Order police state dictatorship on the horizon quickly being introduced based on a global cashless banking and surveillance system of computers, smartphones and LEDs – we still have to contend with the increasing attack from LED blue-light emissions on our retinas as well – which could in fact mean that not only will many people end up behind bars, they may all end up **mad** and permanently **blind** into the bargain. (Deuteronomy 28:28-29 and Zechariah 12:4). Not a nice prospect at all, but there you are. That's what you get when *honesty* goes out the window. But for now, at least for the present, it is the blue light hazard from LEDs affecting peoples' eyes that is by far the most immediate concern.

While completing this book, after discussions with others critiquing it, a number of well-meaning people put forward two valid questions to the author:

Question (1): *"How can you make the categorical claim that blue-light emissions from LEDs are definitely going to cause widespread blindness and serious eye problems in the future, based on a few laboratory experiments on rats – when at best, according to all the statements of the relatively small minority of doctors and scientists that do generally support your views, they say the emissions only "may" produce serious health issues?"*

Short Answer: One would have thought that the empirical evidence [cited in this book with references] from the few HONEST and GENUINELY INDEPENDENT eminent ophthalmologists

and scientists, who have proved that excessive LED blue light toxicity causes serious eye damage to rat's retinas in proper scientific laboratory experiments is already overwhelming – and that this damage is most definitely going to be replicated in human eyes as well.

Question (2): *"How long do you believe the damage from excessive LED blue-light exposure to people's eyes causing Premature Macular Degeneration and other related serious eye problems may take before it fully develops and is recognised by ophthalmologists, scientists or patients themselves?"*

Short Answer: The simple answer is nobody, as yet, conclusively knows *precisely* how long this will take. Normal age-related macular degeneration can take 60-years or more to develop and it is well proven that this sort of damage to the retina can take many years to occur or be diagnosed. However, already there are arising strong tell-tale signs with many types of eye problems increasingly occurring in younger people that were never known or diagnosed before on the scale that they now are in these age groups. The enormous increase in high myopia in school children is a good example and presages what is coming.

However, with the enormous widespread growth of white LEDs for ambient lighting, car head-lights, LED and OLED screens on smartphones, iPhones, iPads, tablets, computers and televisions occurring only within the last 5 years or so, combined with the massive increase in high myopia in school children, this is definitely going to dramatically accelerate the degeneration process enormously.

Children now under about 10 or 12-years of age with *white eyes* who view LED or OLED back-lit iPhones, iPads, computers, TV screens etc. will be by far at the greatest risk. General health, nutrition, exercise, length and intensity of exposure will all have a combined effect, as these factors already do now with UV light damage causing cataracts and other more serious eye problems.

But perhaps, if nothing is dramatically done soon to either radically modify, filter or remove the blue-light hazard from LEDs, the inevitable crisis is going to arrive very much sooner than anyone could ever imagine or predict.

If history teaches us one thing, where money is involved, it warns us to be very wary of trusting anyone – even our "friendly" local family doctor or national scientific expert! There still are a few genuine, good ones around, but the vast majority aren't. Yes, it's a very sad situation indeed, but these are the stark, stone cold facts.

And don't forget to stock up on those old incandescent light bulbs, halogens included. They might still be incredibly inefficient and get hot, but at least they don't destroy your circadian rhythm, give you diabetes, burn your eye-balls out or send you permanently blind!

And lastly, above all, if you believe that "the pen is mightier than the surgeon's scalpel" – and at least agree with *some* of the radical claims made in this controversial book or others like it – please do play your part in circulating this important truth and warning about LEDs – for the sake of our children in the future, for humanity.

Because, regrettably, it is shamefully very unlikely to come in the near foreseeable future from those who should be doing the job – the current mob of unethical world leaders, the banking pirates, global light bulb mafia, the pharmaceutical cartel, or their chief snake-oil pushers, the orthodox mainstream scientific and medical establishment.

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